

The Mining Journal

RAILWAY AND COMMERCIAL GAZETTE

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

No. 1152—Vol. XXVII.]

LONDON, SATURDAY, SEPTEMBER 19, 1857.

{ STAMPED . . . SIXPENCE.
UNSTAMPED . . . FIVEPENCE.

MR. JAMES CROFTS, MINING AND SHAREBROKER,
No. 1, FINCH LANE, LONDON (established 14 years), TRANSACTS every
kind of BUSINESS in MINING SHARES, but, not being a DEALER, BUYS and SELLS
only on orders confided to him.

Mr. Crofts calls special attention to CATHERINE and JANE CONSOLS, lead and iron,
Merioneth, North Wales, which it is estimated will be in the Dividend List early next
year. For sales of lead ore monthly, see the reports from Holywell. The iron lode
is being developed, and the ore shipped to market with all possible expedition. Ten
tons of lead ore have just been sold, realising £150, and 10 tons are now ready for
sale on the 24th inst.

Mr. Crofts also very strenuously recommends VALE OF TOWY Mine, lead, now
paying dividends. The sampling of ore for the present month amounts to 60 tons,
being beyond previous estimates.

Considerable improvements have taken place in both the above mines during the
week; also, in W. EDWARD, BOSTONIDE CONSOLS, and KELLY BRAY. Invest-
ment made without delay will pay handsome profits out of all, or any, of these mines.

Mr. Crofts considers the following shares also worth immediate attention at the
present prices:—
North Wheel Basset. Calstock Consols. Trehafod.
Bollington Well. Great Wheel Bury. Wheal Grenville.
Porkella United. Herodsfoot. Scordridge Consols.
Wheal Margaret. Wheal Margery. West Par Consols.
Providence Mines. Par Consols. Rhoewydol & Bacheiddin.
Alfred Consols. Wheal Wrey. Marke Valley.
Wheal Sidney. Wheal Arthur. Okef Tor.
Lady Bertha. Great Wheal Alfred. Wheal Zion.

"Mr. Crofts' "Manual of Mining" is now nearly out of print, but he will com-
mence to distribute it, gratis and post free, to those interested as investors who may
be desirous of acquiring candid information on mining affairs.

MR. JAMES LANE, MINING SHARE DEALER,
29, THREADNEEDLE STREET, LONDON, has BUSINESS in—
Mary Ann. Calstock Consols. Scordridge Consols.
Trelawny. Wheal Edward. North Bury.
South Caradon. East Russell. Kelly Bray.
West Caradon. Lady Bertha. Catherine and Jane.
Trehafod. Ledcott. Wheal Arthur.

JAS. B. BRECHLEY, of 11, ROYAL EXCHANGE, LONDON,
is a BUYER of North Basset, North Frances, South Carn Brea, East Basset,
Kington Down, South Garra, Pendean, Granbler and St. Aubyn, and Trehafod,
and a SELLER of Alfred Consols, Basset, South Frances, £230; West Darnell, £29½;
Scordridge, East Basset, Vale of Towy, 15s. 3d.; Wheal Reeth, £40; Drake Wallis,
East Alfred, South Condorow, North Granbler, Camborne Vein, North Downs,
Wheal Margaret, Botallack, £307; Kelly Bray, Lady Bertha, and Stray Park.
Market prices furnished on application, or by letter; and all transactions for im-
mediate cash. Bankers: The London and Westminster Bank.

MR. PETER WATSON, RETURNED TO TOWN, having for
the past three weeks been INSPECTING several MINES in CORNWALL
and DEVON; and will afford every information on written or personal application.
Bankers: Union Bank of London.

COMMISSION.—On the Purchase or Sale of Mining Shares, 1% per cent.; on the
purchase or sale of Consols, Railway, Bank, Insurance Shares, &c., the usual Stock
exchange commission.

PETER WATSON, English and Foreign Stock, Share, and Mining Office,
47, Threadneedle-street, London, E.C.
Office Hours Ten to Five, and Ten to Two on Saturday.

MINE SHARES FOR SALE, some of which are paying 20 per
cent., and in all probability will continue to do so for years. Also, a great
many very good PROGRESSIVE SHARES, lower than any for the past ten years.
The present depressed state of the market offers to gentlemen a most excellent op-
portunity for investing in this description of property.—Apply to Mr. LELAND, No. 4,
Fleet-street, Old Broad-street, E.C.

TO CAPITALISTS.—RELIABLE INFORMATION may be
obtained on application to the undersigned, in respect of MISCELLANEOUS
SECURITIES generally. BANK, INSURANCE SHARES, LAND COMPANIES
(British and Foreign), RAILWAYS, FOREIGN STOCKS, and the PUBLIC
FUNDS BOUGHT and SOLD at the closest market prices, and at moderate commis-
sion. References given and required. JOHN BATTERS, Stock and Sharebroker,
28, Throgmorton-street, London, E.C.

MR. F. M. BLYTH, MINING SHAREBROKER, No. 1, ST.
MICHAEL'S ALLEY, CORNHILL, is commissioned to SELL SHARES in
part of the DIVIDEND and PROGRESSIVE MINES. As Mr. Blyth confines him-
self strictly to commission business, the utmost reliance can be placed that all busi-
ness entrusted to him will meet with prompt attention and regularity.

JAMES H. COCK, MINE SHAREBROKER, GENERAL
COMMISSION AGENT, AND ACCOUNTANT, REDRUTH, CORNWALL.
Orders for the PURCHASE and SALE of MINE SHARES, MINING MATERIALS,
&c., promptly attended to.

MR. R. TREDINNICK, BROKER AND GENERAL DEALER,
GRESHAM HOUSE, OLD BROAD STREET, LONDON.

JOHN GLEDHILL AND CO. MINE AGENTS, SHARE
BROKERS, AND GENERAL DEALERS.
MINING RECORDS OFFICE, 7, SOUTH PARADE, LEEDS.
Mines well selected are the best investments, paying from 15 to 30 per cent. on the
day. They have to OFFER SHARES in most of the DIVIDEND and PRO-
GRESSIVE MINES, and are ready to give every information relative to all mining
affairs.—Dated Sept. 18, 1857.

MR. HENRY GOULD SHARP will be happy to receive BUYING
and SELLING ORDERS in every description of MINING, BANK, RAIL-
WAY, INSURANCE, and OTHER SHARES. All town and country communi-
cations will be punctually attended to; and every information afforded to parties hav-
ing spare capital to invest, as to those mines likely to prove most remunerative.

Mr. H. G. SHARP recommends any of the following for present investment:—
Scordridge Consols. Chollacoats Consols. Bollington Well. Carvannall.
Jish & Wentworth. Ding Dong. Haekmoor. Pendean.
West Caradon. Lady Bertha. Great Wheal Bury. Wheal Harriet.
South United. Hockworthy Bridge. Par Consols. Whitehouse Consols.
Mr. H. G. SHARP is instructed to SELL:—
100 Silver Brook, 5s.
100 Bull and Basset, £1½. 50 East Frongoch. 5 Warnia, £23½.
100 Pentre Llyan, £20½. West Par, 10s. 80 Wheal Guais.
Office, 2, Church-court, Clement's-lane, Lombard-street, London.

MR. E. GOMPERS IS A SELLER OF—
Trevor. 50 Exmouth Consols, 5s. 100 Lady Bertha, 10s.
Buller and Basset, 3s. 20 South Bog, £3½. 3 East Wheal Roe.
Silver Brook, 3s. 20 Harriet. 10 Rosewarne.
Gommana. 100 Chollacoats, 6s. 10 Carnwasa.

And a BUYER of—
Scordridge, 3s. 9d. 20 Lelant Consols, £3. 100 East Russell, 37s.
North Wrey, 3s. 6d. 20 Pendean, £3. 3 East Wheal Roe.
Duke of Cornwall. 2 Margaret, £67½. 100 Molland.
Hingston Down, £5. 20 West Ting Tang. 5 Exmouth and Adams.
Halamanning. 10 Trehafod. 5 Great Wheal Bury.

SUCCESSFUL INVESTMENT IN BRITISH MINES depends on
a minute and comprehensive knowledge of the subject. Capitalists unacquainted
with the nature of mining operations and the market should act under the direction
of an **EXPERIENCED AGENT**; and as such, the undersigned OFFERS HIS SER-
VICE to the public in effecting PURCHASES and SALES of MINING, RAILWAY,
INSURANCE, CANAL, INSURANCE, and any other description of stock, &c.

For description of property affords such large profits, with security from undue in-
vestments, and simplicity in transacting business, as British mines, when they are judi-
ciously selected and honestly conducted. The large profits made, the export of mining
operations, the combinations constantly forming for the development of mineral wealth,
the legitimacy and the growing importance of British mining.

W. STOCKWELL is instructed to TRANSACT BUSINESS in the leading DI-
VIDEND MINES, which are yielding on the average 25 per cent. per annum on pre-
miums. He has orders also in well-established British mines, where a stock of many
hundred per cent. may be expected. F. W. STOCKWELL,
4, Old Broad-street, E.C.

R. S. SMITH'S BRITISH AND FOREIGN MINING
METAL OFFICES, 15, CANNON STREET WEST, LONDON.
R. SMITH takes this opportunity to announce to his friends and the public, that
he has OPENED OFFICES, as above, for the DISPOSAL of MINERAL PROPER-
TY, ORES, and METALS, and hopes, by constant attention to the interests of his
clients, to merit a continuance of that confidence which he has hitherto enjoyed.

He has at present a FEW PORTIONS of MINERAL PROPERTIES to
dispose of, on very advantageous terms, which he can recommend with confi-
dence, as well secured and safe investments; they will bear the test of inspection,
yield regular returns as dividends, independent of their steady advances in value.
Other portions will be held by a highly respectable and influential party. Early
application by capitalists is respectfully recommended.

He has also effected of Antimony, Ores, Regulus, Nickel, Spelter, and
minerals.

GEORGE MOORE, DEALER IN MINING SHARES,
1, CROWN COURT, THREADNEEDLE STREET, E.C.
George Moore has FOR SALE, or any part:—

5 Alfred Consols, £12½.
20 Drake Wallis, £2 11s. 3d.
5 Herodsfoot, £2½.
10 Balmoe Consols, £3½.
10 East Alfred, £4 3s. 9d.
20 East Russell, £1½.
10 Great Baddern, 14s. 6d.
10 Lady Bertha, 18s. 9d.

FOR SALE.—30 Bryntail Shares; no reasonable offer refused.
In any business that George Moore is favoured with, in which he is the buyer, he
will give CASH ON RECEIPT OF TRANSFER; and will allow any purchaser of
undoubted responsibility to have shares registered, and receive certificates of same,
previous to payment.

MESSRS. J. J. REYNOLDS AND SON,
STOCK, RAILWAY, AND MINING SHAREBROKERS, No. 1, ROYAL
EXCHANGE BUILDINGS, LONDON, E.C. TRANSACTIONS IN BRITISH
AND FOREIGN MINES, STOCKS, and RAILWAY SHARES, on the usual commis-
sion. The Stock Exchange List of Prices transmitted by post, with special remarks,
dictated by the circumstances of the day, for the information of correspondents.
Messrs. J. J. Reynolds and Son would direct attention to the undermentioned
mining properties, as being well worthy of notice, more particularly to West Seton,
Tincroft, North Levant, South Frances, North Frances, and the United Mines, for
the investment of capital; and, on account of the exceedingly low prices of the shares,
to North Crofty, Camborne Vein, and East Rosewarne, for speculators.

DIVIDEND-PAYING MINES.
Alfred Consols. North Crofty. West Caradon.
Botallack. North Wheel Basset. West Wheel Seton.
Carn Brea. Rosewarne United. Wheal Basset.
Condorow. South Wheel Frances. Wheal Buller.
Derwent Mines. St. Day United. Wheal Clifford.
Dolcoath. Tincroft. Wheal Margaret.
East Daren. United Mines. Wheal Mary Ann.
Great South Tolgus. Vale of Towy. Wheal Seton.
Levant. West Basset. Wheal Wrey.

PROGRESSIVE MINES.
Dale Mines. North Levant. Vale of Towy.
East Alfred. North Wheel Crofty. West Cronis.
East Basset. Penrithral. West Cupid.
East Basset. South Carn Brea. West Stray Park.
East Rosewarne. South Condorow. Wheal Hendon.
Great Wheal Bury. Trevoile. Wheal Unity.
North Frances. Tyne Head (Cumberl).

MESSRS. POWELL AND COOKE, SHARE DEALERS, &c.
HERCULES CHAMBERS, OLD BROAD STREET, LONDON.

MR. G. GIDLEY, MINING SHARE DEALER AND
COMMISSION AGENT, TORQUAY, DEVON.

JAMES HERON has FOR SALE the following SHARES, at the
prices quoted, and FREE OF COMMISSION:—
15 Bryntail, 5s. 9d., call in. 4 East Wh. Rose, £5½.
10 Bollington Well, £1½. 10 South Caradon, £250.
1 Botallack. 10 Grenville, £2.
20 Cather and Jane, 5s. 9d. 20 Great West, 10s. 9d.
1 Cefn Brynno, £4½. 5 Herodsfoot, £2½.
20 Chollacoats, 5s. 3d. 5 Holmbush.
30 College Mines. 10 Kelly Bury, 42s. 6d.
2 Clifton and Went, £4½. 2 Lady Bertha.
20 Drake Wallis, £2½. 20 North Trelawny, 5s. 9d.
10 Dyffryn Castell, 5s. 9d. 4 North Basset, £15½.
10 East Buller, 37s. 6d. 20 North Downs, £2 2s.
10 East Russell, 30s. 20 Pemb. & E. Crin., 17s.
5 East Trefusis, £3½. 10 Pendean Cons., 55s. 9d.
1 Rosewarne, £19½.

Mr. Heron recommends the following Dividend Mines, which will pay 20 per
cent. upon the average:—Wheal Margaret, Mary Ann, Trelawny, Vale of Towy,
Drake Wallis, South Caradon, West Caradon, Par Consols, Herodsfoot, Kitty (Levant).
And the following Progressive Mines:—North Downs, Stray Park, Kelly Bray.

It is fair to presume that money will in a short time become very plentiful; and
capitalists, therefore, should lose no time in directing their attention to the present
depressed state of the mining market, in order to make purchases in well selected
dividend and progressive mines; an investment made under such circumstances cannot
fail to be otherwise than highly remunerative.

3, Adam's-court, Old Broad-street, London, Sept. 18, 1857.

MESSRS. VIVIAN AND REYNOLDS, MINE AGENTS,
68, OLD BROAD STREET, LONDON, E.C.
Messrs. VIVIAN and REYNOLDS are enabled, through the long experience of Mr. W. C.
Vivian as an underground agent and manager of mines in Cornwall, and in various
foreign countries, to afford information on most important mining districts; and to
inspect and report on mines. They are also enabled, by the several years' acquain-
tance of Mr. J. J. Reynolds, jun., with the transaction of the London share market, to
obtain every advantage for those who may want either to buy or sell mining or any
other description of stock.

Messrs. VIVIAN and REYNOLDS have daily information from the principal seats of
mining, which is at the service of those who may honor them with their confidence.
The value of mining stock generally is advancing, owing to the sounder business
principles which are being introduced into this great branch of industry, and to the
brilliant prospects which the present high prices of metals give to mining enterprises.

Messrs. VIVIAN and REYNOLDS are of opinion that there never was a period when
mining stock offered to enterprise so much safety, combined with such good chances
of rapidly increasing value; and, from information recently received, they would di-
rect the attention of capitalists to the following mines, as being sound undertakings,
and their market value not in proportion to their prospects.

North Crofty. South Condorow. St. Ives Consols.
North Levant. New Wheal Vor. East Alfred Consols.
Messrs. VIVIAN and REYNOLDS are SELLERS of the following SHARES:—
1 Wheal Basset, £32½. 50 Son. Condorow, 5s. 6d. 5 Edward, £10½.
1 South Frances, £240. 20 North Penhalidra. 10 North Levant, £2½.
1 Margaret, £80. 2 Trefusis, £14. 25 E. Rosewarne, 16s. 6d.
2 Alfred Consols, £13½. 5 Trevoile, £10. 5 North Crofty, £2½.
1 West Seton. 2 Kitty (Levant), £23½. 8 Stray Park, £2½.
30 Tincroft, £4½. 5 Harriet, 10s. 10 East Alfred, £2½.
1 North Crofty, £100. 5 Trehafod. 5 Wheal Grenville, 35s.
2 Par Consols, £21½. 8 Lelant Consols, £2½.

MR. W. LEMON OLIVER, STOCK AND SHAREBROKER,
4, AUSTINFRIARS, CITY.
BUSINESS TRANSACTIONS IN HOME AND FOREIGN RAILWAYS, FUNDS,
SECURITIES, BRITISH AND FOREIGN MINES, &c.

MR. M. W. BAWDEN, MINE BROKER, GENERAL ASSAYER,
AND COMMISSION AGENT, LISKEARD, CORNWALL.

MR. W. H. BRUMBY, STOCK AND SHAREBROKER,
1, QUIET STREET, BATH, is in a position to give the BEST ADVICE in
the SELECTION and PURCHASE of DIVIDEND and PROGRESSIVE MINES.

MR. R. LINTHORNE, ENGLISH AND FOREIGN MINING
AGENT, 3, ADAM'S COURT, OLD BROAD STREET, LONDON.
BUSINESS TRANSACTIONS IN ALL ENGLISH AND FOREIGN MINES, and other
SECURITIES, on the usual terms of commission. Information afforded in respect
to Dividend-paying and Progressive Mines.

MR. F. LISABÉ, C.E., CONSULTING MINING ENGINEER,
OFFICE, 2, DAME STREET, DUBLIN.
MR. LISABÉ may be CONSULTED personally, or by letter. His long experience
in Ireland will be found useful to capitalists desirous of investing money in mining
and other speculations in that country.

SHEET ZINC AND SPELTER.—MR. WM. JOHNSTON,
14, MITCHELL STREET, GLASGOW, AGENT for the SILESIA SPEL-
TER and SHEET ZINC. Stocks generally kept in Glasgow, Leeds, and Hull. Can
ship direct from Silesia or Hamburg to London or Liverpool with promptness on
best terms.

MESSRS. A. J. HUTCHINGS AND CO.'S
PATENT IMPROVED WIRE ROPE.
SOLE MAKERS TO THE
LORDS OF THE ADMIRALTY, THE FRENCH AND TURKISH GOVERNMENTS,
And the principal Colliery Proprietors throughout the kingdom.

MANUFACTORY, MILL WALL, POPLAR, LONDON.
ROUND and FLAT ROPES of every description, suitable for mining operations
or other purposes. GALVANIZED or UNGALVANIZED, MANUFACTURED upon
the newest and most improved machinery, ensuring greater pliability, durability,
and strength; and is admitted by the principal coal proprietors to be far superior to any
other kind of wire rope. The superiority of these ropes over hempen ones, in point
of strength, lightness, durability, and cost, is admitted by all who have tried them.

GUIDE ROPES, SIGNAL CORD, LIGHTNING CONDUCTORS, &c.

MESSRS. T. P. THOMAS AND SON,
MINING AGENTS,
2, CROWN COURT, THREADNEEDLE STREET, LONDON;
AND AT 11, DALE STREET, LIVERPOOL.

Messrs. T. P. Thomas and Son beg to inform their friends and the public that,
having made arrangements for immediate information of the changes in the appear-
ance of the different mines in Cornwall and Wales, they will be enabled to advise
as to purchases or sales.

Mr. T. P. Thomas having had 15 years' experience of the market and general man-
agement of mines, and his son having had considerable experience as a practical
miner in Wales and in Cornwall (under Capt. Joseph Vivian, of North Crofty), they
flatter themselves they are enabled to give as reliable information and advice as it is
possible to have, and which they will at all times have much pleasure in giving,
either verbally or by letter.

Messrs. T. P. Thomas and Son's charges are 2½ per cent. commission; but, as
dealers, they will be happy to charge or pay nett prices.

MR. T. P. THOMAS, MINING AUCTIONEER,
2, CROWN COURT, THREADNEEDLE STREET, LONDON.

NOTICE OF REMOVAL.
3, FINNER'S COURT, OLD BROAD STREET, CITY.

MR. JOHN R. PIKE, in acknowledging the liberal support he has
received since commencing business as MINING and SHAREBROKER, begs
to inform his friends that he has, for the greater facility of business, REMOVED
to the above address, where he will continue the strictest attention to all business con-
fided to him, whether in the purchase or sale of mining shares.

Mr. J. R. Pike issues daily, when applied for, a List of transactions in the Mining
Exchange, and he pledges himself to do business at a moderate rate of commission,
and in all cases to carefully study the interests of his clients.

Friday, Sept. 18, 1857.

WILLIAM MARLBOROUGH, MINING AGENT,
(For many years with Mr. T. P. Thomas),
37, OLD BROAD STREET, LONDON.

MR. WILLIAM MOORE, STOCK AND SHAREDEALER,
11, HERCULES CHAMBERS, OLD BROAD STREET.
N.B. Business transacted in every description of stock and shares.

MINING OFFICES.—MR. T. CARTHEW, ST. CLARE
STREET, PENZANCE.

CAPT. THOMAS DUNN, of TAVISTOCK, undertakes to INSPECT,
REPORT, and SURVEY any MINES or MINERAL PROPERTY in ENGLAND,
IRELAND, SCOTLAND, or WALES. No objection to take the management
of any mine or mines in the neighbourhood of Tavistock.

MR. FRANCIS, R. BILL, CONTRACTOR, AND GENERAL
ACCOUNTANT AND AUDITOR,
32, BUCKLESBURY, LONDON, E.C.

Contractor for the supply of railway materials of every description. Estimates
prepared. Agencies undertaken. Accountantship business of all kinds performed
under contract.

MR. H. HUXHAM, COLLIERY VIEWER AND MINING
ENGINEER, having resigned the management of Cwmaberri Colliery, is
NOW OPEN to PROFESSIONAL ENGAGEMENTS; and begs to assure those who
may favour him with their commands that all business entrusted to his charge shall
receive prompt attention, and be executed with the utmost fidelity and care. Refer-
ences and testimonials of the highest character can be produced. Terms moderate.

AN IN-DOOR ARTICLED PUPIL WANTED. He would have first-rate oppor-
tunities of attaining a thorough knowledge of practical and theoretical mining en-
gineering, in all its branches.—Pont-y-pridd.

CORT'S TESTIMONIAL FUND.—CAUTION.
MANFIELD alias ROBERT MARKS, of Bloomsbury-place, Brighton, having
SOLICITED SUBSCRIPTIONS from the IRON TRADE wholly WITHOUT
AUTHORITY; any persons having paid subscriptions to MANFIELD alias ROBERT
MARKS, are earnestly requested to COMMUNICATE the same to Mr. Cort, at the
Mining Journal office, 26, Fleet-street, London.

TO SULPHATE OF BARYTES MINE PROPRIETORS.
Messrs. A. FORSTER and CO., of the UNION MINERAL WORKS, BRENT-
FORD, MIDDLESEX, are PURCHASERS of a FIRST QUALITY ARTICLE, in the
crude or rough state, delivered in the River Thames. Applications to be ad-
dressed to their works at Brentford.—London, Aug. 27, 1857.

TO PARENTS AND GUARDIANS.—A CIVIL AND MINING
ENGINEER, and Manager of an extensive Steam Coal Colliery and Ironstone
Mines in South Wales, has an OPENING for a respectable, well-educated YOUTH
as an APPRENTICE, who will have every opportunity of becoming thoroughly ac-
quainted with coal and ironstone mining.—Apply to Mr. H. MULLOCK, printer and
stationer, Newport, Monmouthshire.

THE SECRETARY of a MINING COMPANY of the highest
respectability, and having OFFICES in the best part of the CITY, is desirous
of UNDERTAKING the SECRETARSHIP of another COMPANY, and could, if
necessary, aid in the disposal of shares.—Address, "Q. D.," Mining Journal office,
26, Fleet-street, London.

TO MINERALOGISTS, EDUCATED MINERS, AND OTHERS.
WANTED, by a mineral merchant, a PERSON fully acquainted with mineral-
ogy, economic geology, iron ore, and other mining, for EXPLORING and MINING
IRON and OTHER ORES. Salary £100 per annum, and travelling expenses.—
Answers, stating qualifications and reference, to be addressed to "E. L. O.," Post-
office, Wolverhampton.

WANTED, by the Pencroft Copper and Lead Mining Company, an
EXPERIENCED CAPTAIN, for the SOLE MANAGEMENT of the PEN-
CROFT MINE.—Applications to be made to the purser, Mr. J. B. HERLES, No. 10,
Park-row, Leeds.

RAILWAY WAGONS.—TO BE LET, on reasonable terms, a
QUANTITY of 6 tons RAILWAY WAGONS.—For particulars, apply to Mr.
THOS. NURSE, Wellington Chambers, Cannon-street West, London.

RAILWAY, MINERAL, AND OTHER WAGONS, ON HIRE.
Apply to the LANCASHIRE WAGON COMPANY (Limited), Bury.

OLD TOLGUS UNITED.—SHARES FOR SALE (£30 paid),
price £20; also, SOUTH GORLAND SHARES (£5 paid), price 50s.—Apply
to GEORGE SPATLEY, 15, Old Broad-street, E.C.

FOR SALE, TWO HUNDRED AND FIFTY GREAT CARADON
SHARES, at 5s. per share.—Apply to "O. A.," Mining Journal office, No. 26,
Fleet-street, London.

WHEAL TALLACK.—TWO HUNDRED SHARES FOR SALE,
price 5s. per share, subject to call; also, TWENTY-SEVEN SHARES in
WEST POLBERRO, at 5s.—Address, "T. P.," 21, Graham-street, Birmingham.

ROTTEN-STONE FOR SALE, of first quality, in lots, to suit
purchasers.—May be viewed on application to Mr. JAMES PERRY, 18, Legge,
Birmingham; and J. MOSS and GAMBLE BROTHERS, Franklin Steel Works, Sheffield.

FOR SALE, ONE 2-TONS FORGE HAMMER, nearly new, with
eam. cam shaft, driving wheels, anvil, block, &c.; price £20.—Apply at FEN-
TON LANEWORKS, Manchester.

WANTED, a good SECOND-HAND BOILER, of about 10 tons,
with the usual fittings, for the Duke of Cornwall Mine.—Particulars and
price to be sent to Mr. D. G. GOATLEY, purser of the mine, No. 31, Threadneedle-
street, E.C.

STEAM BOILERS MADE BY WILLIAM WILSON, LILY
BANK BOILER WORKS, GLASGOW, on the most approved principles, and
delivered in all parts of England at moderate rates.

NICKEL AND COBALT REFINING, AND GERMAN SILVER
WORKS, MILL STREET, BROAD STREET, BIRMINGHAM.—STEPHEN
BARKER begs to inform the Trade that he has the following articles for sale:—
REFINED METALLIC NICKEL. OXIDE OF COBALT. (WIRE, &c.)
REFINED METALLIC BISMUTH. GERMAN SILVER—in INGOTS, SHEET,
NICKEL AND COBALT ORES PURCHASED.

THE MIDLAND IRON COMPANY, BOTHERHAM, YORK-
SHIRE, MANUFACTURERS OF RAILWAY TYRES AND AXLES FOR
LOCOMOTIVE ENGINES, CARRIAGE AND WAGON WHEELS. From the tests
to which this iron has been submitted by engineers and railway companies during
several years, its superior quality has been generally acknowledged, and can be un-
hesitatingly affirmed.

QUARTERLY REVIEW OF BRITISH MINING.
MR. MURCHISON'S REVIEW FOR PAST QUARTER, with MAP of the
GREAT WHEAL VOR and LELANT MINING DISTRICTS, is NOW READY,
price 1s., at 117, Blagden-street, within, London.

LEGITIMATE MINING.—PRELIMINARY NOTICE TO THE PUBLIC.

Mr. NICHOLAS ENNOR has for the last ten years in vain attempted to base mining on something like genuine grounds, but has been foiled in his endeavours by parties who earn their living by bringing out mines, indifferent to their intrinsic value, or the observation of economy in carrying them out, their object being to appropriate as much as possible of the subscribed capital to their own use.

The usual way in which they proceed is, after obtaining a sett, they connect themselves with a few engine and material sellers, who take a large interest in the concern, and place themselves on the committee of management; they then glaze the public papers about double the amount of money actually spent; against which they show the shares at a premium; indeed, they state anything that will suit until they have supplied the engine and all the ponderous materials, when they begin to dispose of their shares before they come to be paid for. They still continue in office, until it is discovered that the capital is fast diminishing, when they resign their seats, and the mine is left to be conducted by the parties who were so easily duped; they, not knowing anything of mining, and anxious to find they had been made such easy prey, or, throw up the sett in disgust; this is the reason it so often happens that mines are abandoned before they are fairly begun.

I observe metals are again advancing in price; and I know mines, properly selected and fairly and economically carried out, do and will pay enormous dividends.

It is my intention to purchase myself all engines and materials from whoever they can be had of best quality, and at the lowest prices—much of which can be bought second-hand, equally useful and at much less cost.

I also intend that the resident captain, assisted by myself, shall estimate the cost of all work before it is carried out, by which means I hope to economise the expenditure, compared with the present mine cost, full one-third. NICH. ENNOR.

The first mine I have decided on bringing before the public is—

THE ASHBURTON UNITED TIN AND COPPER MINES

(LATE OWLACOMBE), ASHBURTON, DEVON.

Capital £10,000, in 10,000 shares of £1 sterling each.

Deposit £5 per share on allotment.

The remainder to be paid in two calls, at such periods as may be hereafter agreed on.

The mine to be worked strictly on the "Cost-book System," so as to avoid all liability to individual shareholders. The pursuer to be held liable for all arrears of calls or bills if allowed to stand over more than two months; if not paid within that time, he is to call a general meeting, to forfeit such shares to the company, to be resold at their discretion for the benefit of the shareholders.

DIRECTORS.

CONSULTING AND SUPERINTENDING ENGINEER AND MANAGER.—Mr. Nicholas Ennor.

SECRETARY AND PURSER.—

CAPTAIN AT THE MINE.—

BANKERS.—

PROSPECTUS.

Mr. NICHOLAS ENNOR has much pleasure in recommending to the notice of the public this celebrated old mine, which is known to have produced more tin than any other mine in the county of Devon.

The surface excavations on the lodes of this sett are immense, even exceeding those at Great Wheal Vor, or any other mine known in Cornwall or Devon. There cannot be a question but that thousands of tons of tin have been extracted from this mine, still she may be set down in her infancy, as the deepest shaft is only about 60 fms. deep, and would be sufficient to speak of this sett as being situated in a tin district, as it has been generally well known and celebrated for rich tin mines from time immemorial, indeed this mine was found formerly to be so productive that it caused Ashburton to be made a mining town, where the tin was taken to be coined and stamped before it was offered in the market, and it continued to be a mining town until within the last half-century, in fact, up to the time the law was altered for this as well as all other mining towns. This is a sufficient proof that a considerable amount of tin was risen in this locality, and these mines ever stood foremost, yielding fortunes for the lucky adventurers.

It is still in the remembrance of many that when the mines were last worked they produced immense quantities of tin, almost sufficient to pay costs under the universal bad management of that period.

When last worked water-wheels were erected on it, but they had not half a supply of water, the result was men were kept on the mine waiting for the return of the season, a system of working which at that date nearly ruined every mine in the county, and half of those in Cornwall. It can now be proved that the workmen did not earn expense for such shilling they received; this, and the then expensive mode of working in driving the shaft to surface, stamping and cleaning the ore with water stamps, &c., is a convincing proof that a mine, which at that time would half pay expenses, would now pay a large profit.

The former party, notwithstanding all the disadvantages under which they laboured, did not despair of the mine, but so sanguine were they of ultimate success, that they went 15 miles to obtain a better supply of water, to enable them to prosecute the bottom of the mine. They commenced this water course in land where they had no grant, under the idea that tin miners could divert any running water; this caused a tedious law suit, in which the company failed, the consequent expenses of which were enormous. This suit having exhausted their cash, and the supply of water not to be had, their only alternative was to raise fresh capital to prosecute the mine by steam power, or abandon it. They made the attempt, and secured all their lift of pumps, with new buckets, slacks, &c., 150 fathoms of which are now standing in the different shafts of the mine.

The cessation of operations is to be attributed to their desire to raise a capital of £30,000, of which £20,000 was to go into the pockets of the old adventurers for work done, but when their intentions became known they, of course, failed to raise the desired sum on such conditions, and after quarrelling amongst themselves, the mine was neglected, and ultimately abandoned, with a large quantity of materials on it.

Having obtained a new grant of this sett, it is with great satisfaction that I state the lords of the soil, as well as mine adventurers, now know the value of the steam-engine, and are aware of its capabilities, consequently the lords have granted at the very moderate rates of 1-20th for tin, and 1-15th for copper, if worked by steam power. This mine can be quickly laid open, and every man so placed as to earn a shilling before he receives it.

Judging from the numerous reports, the result of this mine must ultimately be profit to the adventurers, as can be seen by reference to a former account, where it shows that by an outlay of £5000 exclusively for mining purposes, they returned £14,000 worth of tin and copper, in less than three years, commencing in 1845, and £13,000 in quality, as it fetched the best price of any in the county; and further, that during the five ensuing years, tin to the amount of £37,000 was extracted; both these lots of ore were risen at an outlay of about £50,000, and sold at an average price of £40 per ton, whereas it would now bring £30 per ton, or for round numbers say double what it then fetched, or about £100,000; therefore, had the mine been fairly managed it would then have paid a handsome profit; under the present price of tin it would have paid about £50,000.

On an inspection of the plans, it will be seen that this sett was worked as three distinct mines. First—The Union or Eastern Mine, on a tin and copper lode; Second—North Great Beam lode, and South Great Beam lode, worked for tin. From South Beam lode, a branch is gone off nearly south to Union lode, where the 11 is extended on until they meet with the Union lode, this branch produced good copper, and was worked away on tribute; as I have before stated, in working on this branch Union lode was intersected, but so much water issued from it that they were afraid to drive, as it would let out such a quantity of water as to prevent the engine keeping Hobson's shaft clear; very excellent ore was taken from this lode where cut; indeed, I have now a stone in my possession worth 55 per cent. for copper, and 40 ozs. of silver to the ton.

The third mine was opened on Union lode, at Brother's shaft, about 50 fms. west of the end, where it is intersected by the branch; on this part of the sett it is evident a water-wheel was fixed, and tradition says they raised hundreds of tons of copper; but the parties who worked the adjoining sett, choked their adit, which emptied itself into the mine, and the mine was filled with water, and, in consequence, they were obliged to abandon this rich copper lode, leaving a lift of pumps with a brass working in the shaft—under these circumstances, this portion is a good speculation of itself, in fact, such as is not often met with.

There are also three or four very promising lodes, with old workings on them, still farther south, which can be worked in conjunction with this mine, or separately; an adit has already been extended 90 fms. towards these lodes, but they have not as yet been cut.

In working these mines, it is not prospecting as it were in search of ore, as it is well known by hundreds to be there; witness the quantity of ore that has been returned since the last company ceased working—a miner, an invalid, with four assistants, have risen £5000 worth of tin, and they are now returning nearly a ton of tin per month from the refuse.

These mines can be laid open by means of two steam-engines, one for pumping, and the other for drawing the stuff to surface and crushing the ore. The ground is very easy for excavating shafts, levels, and pitches; pitches that cost in the last working 5s. in £1 can now be worked for 2s. 6d. In fact, it is apparently a most extraordinary well, as every one speaks well of it, stating it to be a good mine, raised when last worked by needless expenditure and universal bad management.

It will be seen on perusing the report of Capt. Hosking (an old practical tinminer of fifteen years standing in the mine, and one who drove scores of fathoms of the levels on tribute, by which he did well), that in the back and bottom of the lower level at Hobson's shaft, there is a lode now standing worth £60 per fm. Now if it be only half as good as reported, shares will be at a premium before the water is out, which can be accomplished in a few months, the mine being shallow.

If the lords of the soil would permit, I should have stamps erected, and from the adit send tin to grass sufficient to pay a dividend (as they are now doing at Great Polberrow), before commencing to open the mine, when in lieu of giving away, as I now propose in free shares as it were, I should be enabled to sell the mine at a very advanced price.

CAPT. WILLIAM HOSKING'S REPORT.

Ashburton, Aug. 16, 1857.—I beg to hand you a few observations on the OWLACOMBE, or ASHBURTON UNITED MINING SETT; and from my long experience in these mines, having worked in them from 18 to 15 years, I believe I have it in my power to give considerable information, both as regards the nature of the country and the character of the lodes. The extent of the sett is very great, being one mile wide, and one mile on the run of the lodes, of which there are eight already known, five of them tin, one a champion copper lode, and the others producing both copper and tin. The lodes run about 22° north of east and north of west; the stratification is a beautiful soft killas, and near the granite junction. The surface workings are of immense extent, and probably executed many centuries since. Within the last 20 years, I may safely say £100,000 worth of tin and copper has been raised and returned from four lodes only, and I have myself, as a tributer, broken some hundreds of tons of tin from them. Previous to my knowledge of these mines, vast quantities of both tin and copper had been raised and sold, to what extent it would be impossible for me to say; here you will naturally say, how did the mines become abandoned? It arose from want of sufficient machinery to keep the levels clear of water, the only power being that of water, which invariably fails for five or six months in the year; unfortunately also, the company under which I worked claimed the right of taking water and conveying the same without consent or purchase, the consequence was a law suit, ending in a loss of from £15,000 to £20,000 to the adventurers, who failed in establishing their claims. There is one common adit running through these mines. The first shaft intersected by it is the Union shaft, at 12 fms. from surface; the next going west is

Hobson's shaft, intersected at 14 fms.; the third is James's shaft, intersected at 18 fms.; the fourth, Parry's shaft, at 18 fms.; the fifth, Murray's shaft, at about 23 fms. from surface. I have so far given the depth of the different shafts to the adit. I will now inform you of the depth of those shafts below the adit; the Union shaft is 42 fms., here large quantities of tin have been raised; Hobson's shaft is 55 fms., here immense quantities of tin have been raised of a superior quality, and many tons of copper of highest produce, and there is now in the bottom level of this shaft a splendid course of tin for a great many fathoms in length, worth from £30 to £50 per fm.; James's shaft is 35 fms. under the adit, where large quantities of tin have been raised; Parry's shaft is 65 fms. below the adit, here great returns of tin have been made, and good profitable ground still remains; Murray's shaft is 25 fms., here quantities of tin have also been raised. I have stated already that all the mineral sold within the last 20 years was raised on four lodes, consequently four remain unworked—two of these in particular, called the Brothers, a champion copper lode; and the Lady's, a tin and copper lode; the former underlying south, and the latter underlying north, consequently they will intersect each other in depth. Taking all things into consideration, the quantity of work done, the large returns that have been made, the beautiful nature of the ground (killas near granite), I am persuaded that a finer sett is not to be found in the two counties; and were steam-power erected sufficient to command the whole of the lodes, I think it would be found to be a second Great Wheal Vor. I should say that a capital of £10,000 would be sufficient to fully develop and profitably work three of the lodes in this extensive and valuable mineral property, enabling the erection of from a 50 to a 60 in. cylinder engine for pumping, and a steam-engine for hauling and stamping, with all other necessary appliances. From my long experience in the Ashburton district, and more particularly in that part which comprises the Ashburton United Mines, I can with confidence concur in the statement set forth in the prospectus, that the return of tin and copper from these mines have for centuries given celebrity to the district. I am only surprised that such a valuable mineral property has been neglected for such a length of time. WILLIAM HOSKING.

MR. WILLIAM LEWARN'S REPORT.

Ashburton, Aug. 20, 1857.—Being informed that Ashburton United is about to be re-worked, it is with pleasure I make the following remarks, first noticing that I am an old miner, and worked as a tributer in near every part of her. When I come to reflect on the state she was left in, and the present high price of tin, I consider myself fully justified in stating it is my belief that this is one of the best mine speculations in the county. When I look around and see thousands and tens of thousands of pounds spent on acts containing no ore of any kind, I am more than surprised that this valuable piece of ground should have so long remained idle, as the ground is easy, and a large sum would not be required to bring her out. No person who knows the mine can gainsay but that immense quantities of tin and copper will be taken from the lodes that have already been partially laid open, independent of all the side lodes not yet worked on, known to contain good tin and copper.

WILLIAM LEWARN.

I might annex hereto a legion of favourable reports, from both practical and professional men, but consider my own observations and the quantity of ore that has been returned, with the substantial remarks contained in Capt. Hosking's report, and in that of an old tributer, sufficient. NICHOLAS ENNOR.

* * Notwithstanding the short time this mine has been before the public, the greater part of the shares are applied for; but before the allotment is made, bankers will be named to receive the deposits. I have been asked by one or two why I have not named a committee and secretary; my reason is, I am desirous the committee should be selected from bona fide shareholders. In choosing a secretary, I shall endeavour to fix on a pains-taking business man. I avoided in the first instance to foist upon the public a committee of high-sounding names, which is too often attempted. I, as a miner, determined to offer this mine to the public individually, and from the number of applications for shares I have received in so short a time, I cannot but feel proud of the confidence reposed in me. NICHOLAS ENNOR.

RIVER TAMAR COPPER MINING COMPANY (LIMITED).

Capital £10,000, in 10,000 shares of £1 each.—Deposit 5s. per share.

With power to increase.

Calls not to exceed 5s., at intervals of not less than six months.

OFFICES.—10A, KING'S ARMS YARD, MOORGATE STREET.

The River Tamar Copper Mining Company has purchased the sett hitherto known as the South Devon Great Consols Mine, under which appellation it has been prosecuted for upwards of four years last past, with the greatest vigour and judgment.

The mine is situated in a stratum of granite and killas, the former being exactly similar to the granite which yields such great results at Grass Lake; and the latter being in every respect like that which has yielded such unprecedented returns at the Great Devon. The presence and junction of these two formations are highly favourable to good deposits of copper, and the mine is traversed by cross-courses, which appear to be necessary to the development of profitable copper mines. The character of the lode at the shaft is wider than the general run of granite lodes, which is also a promising feature, and it runs nearly vertical, which is also a further advantage. Gossan is found in the lode as low as the 55, a good indication of a deep and profitable mine; and, lastly, the kind of copper ore which is found in this lode is of the highest possible quality, that the smallest quantities would be remunerative. In these peculiarities, every known circumstance which tends to great success exists, and at the present time a discovery of a remunerative deposit may be made at any moment.

Applications for shares, according to the subjoined form, accompanied by the receipt of the bankers of the company for a deposit of 5s. per share on the number of shares applied for, may be made at the office of the company, and all applications by former adventurers in the South Devon Great Consols Mining Company will have precedence.

FORM OF APPLICATION FOR SHARES.

To the Directors of the River Tamar Copper Mining Company (Limited).
Offices, 10A, King's Arms-yard, Moorgate-street.

GENTLEMEN,—I request you to allot me _____ shares, of £1 each, in this company; and hereby to receive the same on any less number which you may allot me, and to execute the Articles of Association of the company when required; and on failure so to do, I consent to forfeit the deposit of 5s. per share now made with the bankers of the company. _____
Name in full, _____
Dated this day of _____, 1857. _____
Residence, _____
(State if an adventurer in the South Devon Great Consols Mining Company, and the numbers of the scrip certificate held.) _____

INVESTMENTS IN BRITISH MINES.

Full particulars of the most important Dividends and Progressive Mines will be found in the Fourth Edition of
BRITISH MINES CONSIDERED AS AN INVESTMENT.
Recently published by J. H. MURCHISON, Esq., F.G.S., F.R.S.
Pp. 356; price 3s. 6d., by post 4s.

Mr. Murchison also publishes a QUARTERLY REVIEW OF BRITISH MINING, giving, at the same time, the Position and Prospects of the Mines at the end of each Quarter, the Dividends Paid, &c. The Review is published quarterly, ending the 30th of June, contains a Map of the Wheal Vor and Leland Mining Districts, price 1s. Reliable information and advice will at any time be given by Mr. Murchison, either personally or by letter, at his offices, 117, Bishopsgate-street Within, London, where copies of the above publications can be obtained.

OPINIONS OF THE PRESS.

Mr. Murchison's new work on British Mines is attracting a great deal of attention, and is considered a very useful publication, and calculated to considerably improve the position of home mine investments.—Mining Journal.
The book will be found extremely valuable.—Observer.

A valuable little book.—Globe.
A valuable guide to investors.—Herald.
Mr. Murchison's work on the important subject of his book, and has placed, for a small sum, within the reach of all persons contemplating making investments in mining shares that information which should prevent rash speculation and unproductive outlay of capital in mines.—Morning Herald.

Of special interest to persons having capital employed, or who may be desirous of investing in mines.—Morning Chronicle.
Of great value to capitalists.—Standard Times.

Parties requiring information on mining investments will find no better and safer instructor than Mr. Murchison.—Leeds Times.
One of the most valuable mining publications which has come under our notice, and contains more information than any other on the subject of which it treats.—Derby Telegraph.

To those who wish to invest capital in British mines, this work is of the first importance.—Welshman.
This work enables the capitalist to invest on sound principles; it is, in truth, an excellent guide.—Plymouth Journal.

All who have invested, or intend to invest, in mines, will do well to consult this very useful work.—Liverpool Express.
This is a really a practical work for the capitalist.—Stockport Advertiser.

Persons desirous to invest their capital in mining speculations, will find this work a very useful guide.—Warwick Advertiser.
It is full of carefully compiled and reliable information relative to all the known mines in the United Kingdom.—Sheffield Free Press.

Those interested in mining affairs, or who are desirous of becoming speculators, should obtain and carefully peruse the work.—Morning Beacon.
Every person connected, or who thinks of connecting himself, with mining speculations, should possess himself of this book.—North Wales Chronicle.

A very valuable book.—Cornwall Gazette.
All who have invested, or intend to invest, in mines, should peruse this able work. We believe a more useful publication, or one more to be depended on, cannot be found.—Plymouth Herald.

Mr. Murchison will be a safe and trustworthy guide, so far as British mines are concerned.—Bath Express.
Is deserving the attention of every one who seeks profitable investment of his capital.—Brighton Examiner.

With such a work in print, it would be gross neglect in an investor not to consult it before laying out his capital.—Poole Herald.
To capitalists the work will prove very serviceable.—Birmingham Mercury.

DO YOU LOCK UP YOUR CASH AND BOOKS?
If not, lose no time in getting one of GRIFFITHS' SECOND-HAND FIRE and THIEF-PROOF SAFES, for bankers, shippers, merchants, or public companies, by the most eminent makers, at half the cost of new. WROUGHT-IRON DOORS for strong rooms and party walls. Price of safes, 24 in. height, 18 in. width, and 16 in. depth, £3 10s. All safes from this establishment warranted to be fire-resisting, sound, perfect, and quite equal to new.
MR. GRIFFITHS, 101, Whitechapel-road, near Mile End-gate, E.
N.B. Fire-proof Safes, Iron Doors, or Office Furniture bought.

CORNISH MINE PHOTOGRAPHS—No. XV.

"ST. JUST FEAST."

"It is a faint heart that never rejoices," is the cheering apothegm to many a saddened, depressed spirit, when resuming its wonted elasticity, after severe affliction; inducing that return of self-confidence so desirable and laudable in adversity. This exciting phrase has kindled many an ardent spirit into vigorous exertion, after extreme despondency. We do not, however, now intend to apply it in these its highest attributes, but as the watch-word and palliative for the exuberant glee, riotous festivity, and (for them) lavish expenditure indulged in on the ancient annual festival forming the subject of our paper.

Owing to the great number of mines at work in its immediate proximity, many of which are remarkably productive, this once small, and then secluded, village has so increased during the last 20 years that it rivals many of the older country towns in population and appearance, the old and handsome church and high cross forming prominent objects; its very large and stately Wesleyan chapel surprises a stranger by its proportions, exciting a wonder where a population can be found to fill such a tabernacle, in addition to those passed in every hamlet on the wayside.

St. Just is the only village of any pretensions west of Penzance; it is, par excellence, the mining parish of the West, being full of mines, and conferring, for this reason, a name to the whole district; the people are generally miners; the land, from its proximity to the sea, and consisting principally of hilly, wild, rocky, bleak, common and moorlands, affords but small employment for agricultural labourers. Not a tree is to be seen; we believe that there are not a dozen in the parish: there were a few at Nancherrow, but we think even those are gone. If agriculturists be in the parish, they soon become imbued with miners' independent habits and associations, and go underground, if the miners will allow them. A regular miner plumes himself as being far superior to a labourer—as indeed he ought, seeing he executes as much work as two or three of them. The wages paid for mine labour in St. Just, until lately, were lower than in any other part of Cornwall, and the men not so well treated: emigration and oppression have their done work, and remedied this. Now St. Just, which, as they are called, are to be found everywhere; and a hardy race they are—born on a wild common, inured to hardship and toil from an early age (at 10 years old boys and girls are sent to mine), and when they arrive at manhood are remarkable for activity and strength. The period of a miner's labour underground is eight hours; he, therefore, has several hours in which he can employ himself beneficially, especially in summer time, their cottages usually having a garden, meadow, or potatoe field adjoining, in which they amuse themselves; in the autumn, they form parties of two or three, and go out night fishing off Pendennis and St. Just Cove, where a sail or row of half an hour places them on some of the finest fishing ground in Europe. At this season, when the pilchards are off the coast in myriads, large fish abound also, attracted by the vast shoals of their favourite prey. Not unfrequently, two or three nights fishing (these miners being very expert in the use of boats and fishing gear) suffice to supply their families with a winter's stock of prodigiously fine cod, ling, hake, and conger eel, which, when carefully salted and dried, are to be seen in every house, forming many a substantial meal; these, together with salted mackerel and the favourite pilchard, form the staple food of the inhabitants of this and other mining parishes.

Until within the last ten years, Cornwall was celebrated for the excellence of its potatoes; these were also abundant and cheap. Then, "pilchards and tates" one day, and "fish and tates" the next, with "flesh" on Sundays, formed the bill of fare throughout the year, except at Christmas, when "goose," and on feast-day, when roast beef and plum pudding graced the board, with a drop of "moonshine" to wash it down, for which gratification many a brave and daring fellow's life has been periled and sacrificed on that dangerous coast! Could but the adit levels along the cliffs at Wheal Owles, Botallack, Wheal Coal, Levant speak (they roar with the gale and whisper in the zephyr breeze)—could they and Pendennis Cove reveal the secrets transacted in them—Custom-house and Revenue officers would stand aghast, or perhaps would, as it is said they sometimes do—but we won't say what that is, or should be, their look out, not ours. Everybody knows there must be "moonshine" at St. Just—aye, and Buryan, too—for feast. Even if a certain old gentleman stood at the door and ran the risk of being put into a Cornish pie, "moonshine" must be had for St. Just Feast; it always was so, and always will be so to the end of time. We have tasted it, and will taste it again if we have the chance, were it only to keep the old custom up. It is the practice from Trewellard to Chapel Carn Bray, and from Cape Cornwall to Newbridge; it has been so from the days of St. Just himself, who, doubtless, like the Coast Guard, winked at its introduction, and smacked their lips at its taste, each being wise enough in their generation to "ask no questions." Had Father Matthew himself been there on feast-day, we verily believe he would have taken the *cacochæla bibendi*, and have "sworn there was nothing like grog." It is necessary to give this long prelude, that the lights and shadows of our picture may be more plainly developed. The habits of these poor people being, of necessity, very economical, their lavish expenditure renders the contrast more striking, and the zest with which they enjoy their festival the more keen. To many, who fare luxuriously every day, it may appear trifling and silly; to them it is a high day—indeed, the highest in the calendar, all parish gossip taking its date from its golden letter. Time, the revealer of all secrets, hides the feast-day until it comes; but it requires no almanack to foretell its advent; six months before hand children, unable otherwise clearly to define the period, begin on their tiny fingers to count up the weeks: the bal boys, too, begin to demand sixpence a month from "mother," out of their wages, for feast. The frugal housewife, too, puts by all she can spare for "nackins"; and the men, too, work hard and long, to earn a little extra wages over their regular pay, so as to have a shilling or two to spend over and above the "old woman's" allowance (as "it won't do to let the miller know of all the water that goes over the wheel"), each worthy endeavouring to keep their savings as private as possible from the other, for fear anything unforeseen should turn up to prevent a feast. It is a time of rejoicing among friends and acquaintances—such a feast as we presume was intended of old, when none, not even the wayfarer or stranger within the gates was to be unwelcome—distinctions are levelled, animosities forgotten, and compliments exchanged throughout the length and breadth of St. Just parish.

Soon after noon on Saturday, crowds of the miners and their wives, in holiday attire, may be seen hurrying off to church town to make purchases for the important occasion; the latter, after making their markets, just take a little "drop" by way of commencement, and are soon off to prepare for the morrow. The church town is the scene of great bustle. The butchers provide the finest oxen they can purchase for this market, which is plentifully supplied with every necessary. The place is filled with "Cheap Johns," and all the minor appanages of "Truro Fair," showing all the outward and visible signs of a repetition of that spectacle. The public houses are filled—we meet half a score mine captains and coast guard officers, hundreds of miners, &c.—a general recognition and shaking of hands takes place, invitations and compliments are heard on every hand; arrangements for parties are made by young people during the ensuing week, so as not to trench on each others engagements, or monopolise all the fiddlers. The older portion crowd the bar room of the Star, and other hotels, where the hosts and their wives are as busy as they can desire. The houses are full, notwithstanding the bed rooms, brew houses, and every available spot have been emptied to accommodate the swarming guests. "First come, first served, and money down," is the order of the evening, as the uncouth, red-faced, heated "tenders" (waiters) hurry to and fro with the foaming tankards of ale and glasses of toddy. The bar rooms are squeezed with respectables, and tobacco is smoked until it is a matter of impossibility to see from one end of the table to the other; this, too, is termed enjoying themselves. This scene continues until ten or eleven o'clock, when every road, lane, highway, and field-crossing is thronged by parties returning, laden with as much provision of some sort as they can carry. The quantity of good things of this world conveyed from St. Just and Penzance for this occasion is really astonishing. Few people are seen intoxicated on the Saturday, as that would spoil the game; they, therefore, retire rather earlier than ordinarily.

On the Sunday morning, everybody that can be spared from cooking is at the parish church or chapel, in their bit of best. Many a new garment is purchased for this occasion that would not otherwise have been bought, and many a child is well clad that would otherwise probably have been in tatters. A joyful sight, indeed, it is to witness so many happy, contented, neat, and comfortably clad labouring poor. Such a sight no country else

* Smuggled brandy and hollands.

† It is said the devil never comes into Cornwall, for fear of being served as every thing else is in that county. ‡ Trifling luxury.

Meetings of Mining Companies.

THE IMPERIAL BRAZILIAN MINING ASSOCIATION.

The adjourned special general meeting was held at the offices, Winchester House, Old Broad-street, on Thursday, Capt. LEICESTER VARNOR in the chair.

The CHAIRMAN read the notice convening the meeting, and observed that the proceedings had been adjourned from time to time, for the purpose of enabling the directors to bring into shape a certain proposition for the purchase of the property. The directors and committee appointed to act with them had given the best consideration to the subject, and not left a stone unturned to obtain the highest possible amount. They had now gone so far as to accept conditionally the best offer they could get, being of opinion they were not likely to obtain more favourable terms. The first sum offered was 10,000*l.*; that was afterwards increased to 20,000*l.*, and since then the upshot offer was 32,000*l.*; and, although some of their friends considered they might have done better, they had obtained an offer for more than triple the amount tendered in the first instance. They had now met for the purpose of giving the proprietors an opportunity of confirming the resolution passed April 9, for absolutely winding-up the company. He (the Chairman) concluded by moving a resolution to that effect.

Mr. SCHOFFIELD seconded the resolution, which was unanimously carried.

Mr. FIELD wished to know about what time they might expect to reap the fruits of the resolution?

The CHAIRMAN said, 10,000*l.* was paid down as a deposit, and, as the resolution was confirmed, 31,000*l.* would be paid in Brazilian bills at 60 days' sight, upon a power of attorney being sent out to absolutely transfer to the purchaser the whole property.

Mr. SCHOFFIELD considered the proceeds would be divisible in three or four months, and he calculated it would amount to 3*l.* per share, after paying all liabilities.

The CHAIRMAN, in answer to a question, stated that they had used part of the reserve fund in preference to making a call.

A vote of thanks to the Chairman terminated the proceedings.

WHEEL EDWARD MINING COMPANY.

The general meeting of adventurers was held at the offices of the company, Austin-friars, on Thursday, Mr. T. C. MUNDAY in the chair.

Mr. EDWARD KING (the secretary) read the notice convening the meeting, and the minutes of the last, which were confirmed.

A statement of accounts, ending with July cost, was submitted, from which the subjoined is condensed:—

Copper ore sold	\$3740 18 8
Balance last audit	\$330 16 9
Mine cost, May	625 1 8
June	629 8 0
July	737 12 1
Discount	18 2 9=2542 1 8

Balance in favour of adventurers

Mr. KING then read the following report, from Capt. East:—

Sept. 15.—NORTH LODE: Since the last general meeting the diagonal shaft has been made complete for driving to the 71, and a trip-plat cut in the 62, and we are now enlarging the plat in the 71. The 71 east is now being driven with full force, and is extended about 10 fms. east of the shaft; the lode has been generally unproductive before about the 10 fms. east of the shaft, but has since been changed in character, and is now about 3*l.* wide, and worth from 1 to 2 tons of good ore per fm. This is the first shaft of ore east of shaft, and from the present appearance it will be found of some importance in this level. The 62 east has been extended about 18 fms., and is communicated with the sink level the 52; the lode has been productive for nearly the whole distance of driving, worth on an average from 3 to 4 tons of ore per fm. There is one stop in the back of this level working by six men, at 35*l.* per fm., and the lode is of about the same value as before stated. In the bottom of this same level there are two winzes in full course of sinking by eighteen men, Nos. 8 and 9; the lode in No. 8 will yield from 7 to 8 tons of ore per fm., and No. 9 from 6 to 7 tons per fm. The 63 west has been extended about 9*l.* 2*l.* fms., at which point we have cut the cross-course seen in the level above, and it will occupy a few days more before the nature of the lode on the other side of it can be ascertained. The lode has seldom failed in yielding stones of ore of good quality, and assumes a strong healthy appearance, and, judging from the indications in the level above, I think the probabilities are decidedly in favour of having ground that will pay for working in the back of this level after a winze is put through from the 52 for ventilation. The 53 east has been extended 6 fms., and the same remarks as made with respect to the lode in the 52 will equally apply to this point. The 41 west has been extended about 9 fms., and the lode has varied in size from 2 to 4*l.* wide, and in places has yielded some rich quality ore, at present the lode is about 2*l.* wide, and looks promising. The principal feature of importance in connection with this point is the intersection of the cross level, which cannot be many fathoms in advance of the end, unless it has changed its bearing and underlay. The tribute department consists of 30 men at different points, at an average tribute of 7*l.* 4*l.* in 1*l.*, and which has been about the average for the last quarter. The principal object to be pursued at present on this lode is to open out the 71, and communicate with the 50, or Wheel Edward level, and for that purpose I would strongly recommend that as many hands be employed as may be found necessary to expedite the work, as when it is complete it will be of great benefit to the concern for carrying on future operations, as well as laying open a considerable quantity of ore ground.

SOUTH LODE.—The engine-shaft is now down about 13 fathoms below the 50, which is about 9 fms. below the depth required for a cross-cut to the north lode. The last 11 fathoms have been sunk on the course of the lode, and which have never failed to present favourable indications. About 3*l.* fathoms below the perpendicular we first cut through it, and found the lode from 5 to 6*l.* wide, with a small leader of ore on the foot-wall, sufficient to induce us to carry down the lode in sinking, and which we have found to gradually increase in size and value, even from that point to the bottom of the shaft. The lode for about the last 2*l.* fathoms sinking has turned out fully 40 tons of good firm yellow copper ore, and in the bottom of the shaft it may be fairly rated at 30 tons per fathom for the length of the shaft—12 fms.; value about 180*l.* per fathom, and strongly indicates greater value in depth. The 30 east is extended to the point required for a rise against the trial shaft for the purpose of ventilation, and from what I can find we have about 6 or 7 fathoms to rise to complete the communication. This is the first thing required; and, secondly, a winze put through from the 40 to the 50, after this work is done we shall be in a position to resume operations at any other point which may be considered of most importance.

Having endeavoured to point out by the former statement what has been done, and what is now in progress, I should remark that the operations in addition, which will be carried on on the south lode, will be the driving of two ends in the 61; we shall drive about 6 fms. east and west of the shaft before we commence casing and dividing it down; after which a trip-plat must be cut, and preparations made for sinking. I calculate it will occupy about eight weeks to get this point in full operation—i.e., the sinking of the shaft, and driving both the bottom levels; and having carefully considered the amount of cost required to fully prosecute all these important points as described on both lodes, I find that it cannot be estimated at less than 800*l.* per month, while the returns will probably range from 1200*l.* to 1800*l.* per month for the next three months. The number of hands employed underground at present are—65 on tubwork, 30 on tribute, 12 trammers and fillers; and at surface 65, on the average, making the total number of 172 persons. There are two excellent steam-engines erected on the mine for pumping, drawing, and crushing purposes. The pumping-engine is a 36*l.* cylinder, and by means of having the advantage of the adit level it is of ample power to drain this mine at least 100 fms. below the present depth.

In conclusion, I beg to remark that the present position of this property is solely and simply the result of having given it a spirited trial, which is the only sure step to be taken in such matters; therefore, having been successful of late, I think it behooves you all now, as having a property of great promise, to support the thing which is most essential, by continuing to follow the principles of spirited working, and endeavour to make further discoveries. I do not think that I am doing wrong in stating that the important improvement which has recently taken place on the south lode is one of the greatest importance which has been known to take place in this locality for a great number of years. The lode is large, strong, and masterly—indeed, it is well known to be the champion copper lode on the south side of the granite range, and this set has the full benefit of it for upwards of 500 fathoms in length. Of course you are aware that a very great moral might be said respecting this, but as I deem it hardly necessary on the present occasion to make a long comment, suffice it to say, that at no former period has this mine presented such a promising feature as at present, as it can be seen by my reports from time to time that the most favourable chances have been taken place at the deepest points. The mine is well situated, the set is of immense magnitude, and the probabilities are most decidedly in favour of having a good and lasting mine.

The CHAIRMAN said Capt. East was in attendance, and would answer any question that might be put to him. He was glad to see Mr. Rosewarne present; and, as he was a practical gentleman, he should be glad to hear any enquiries made by him.

Mr. ROSEWARNE said, Capt. East had always great hopes of the south lode, and he believed if his suggestions had been followed they would have been in a dividend-paying state long before this. He believed a better course of ore had never been seen. There was also an excellent course of ore on the north lode, and he believed they had a good and lasting mine.

Mr. POWELL (Powell and Cooke) said he should like to know Capt. East's opinion of the north lode.

Capt. East said the recent improvements were in the deepest part of the mine. In depth the points were worthy of consideration. He considered they had a mine of great importance. In the 64 they had good ground; they had also a good lode in the 74 west, and in the winze sinking at the last meeting the lode was worth 30*l.* per fm.

Mr. POWELL wished to know if there was any doubt of the lode holding down.

Capt. East said he had no doubt of the lode holding down.

Mr. POWELL observed that Mr. Rosewarne was of the same opinion as Capt. East, that they would obtain their greatest riches in depth.

Capt. East, in answer to a shareholder, did not consider the reserves were diminished. As regarded the south lode, it would be unwise to estimate the reserves at the present time.

Mr. ROSEWARNE considered the discoveries in Wheel Edward the greatest of the present day.

Mr. POWELL said he was underground last week, and was astonished and delighted; in his experience in mining he never saw anything equal to the course of ore in the south shaft, and the north lode was likely to become richer in depth.

Mr. PETER WATSON was also of opinion that the north lode would be productive in depth. He considered the conduct of Capt. East highly creditable, and that he ought to have more salary.

Mr. WATSON enquired when they expected to reach the cross-course in the 41 west? Capt. East estimated that they had about 2 or 3 fms. to drive, and it was considered a very important point.

The report and accounts were then unanimously adopted.

The CHAIRMAN said the committee had taken into consideration the salary of Capt. East, which it was proposed to increase to 10*l.* 10*l.* per month. He perfectly agreed with Mr. Watson that the works were carried on in the most satisfactory manner.

Mr. PETER WATSON said he had much pleasure in proposing that Capt. East's salary be increased to 10*l.* 10*l.* per month. He was much gratified with the way he had conducted the operations; they had a splendid course of ore in the shaft, and Capt. Nasarow, who inspected it, agreed with him that it was one of the finest mines in the two counties.

Mr. POWELL agreed with the remarks made by Mr. Watson. In his experience, he did not know an agent more ready to give an explanation than Capt. East.

A resolution was then unanimously passed, increasing Captain East's salary to 10*l.* 10*l.* per month. The committee of management were re-elected, and a vote of thanks passed to the Chairman.

Mr. ROSEWARNE said they must not forget their secretary, and he should propose

a vote of thanks to Mr. King for the able manner in which he had conducted their proceedings. Mr. CARTER seconded the resolution, which was carried unanimously. Mr. KING, in answer to a question, said the negotiations with Wheel Arthur had not been finally settled. The matter had been referred to Capt. Pope and Mr. Henderson, and he believed within the last three or four days the agreement had been executed.—A vote of thanks to the Chairman terminated the proceedings.

GREAT WHEEL VOR UNITED MINING COMPANY.

The quarterly meeting of proprietors was held at the offices of the company, Gresham House, on Wednesday, Mr. E. VANITTART NEALE in the chair.

Mr. ALISON (the secretary) read the notice convening the meeting, and the following report of the committee:—

The committee have to report a progress in the drainage of the old mine less rapid than they had hoped, although uninterrupted by any special causes of delay beyond those incidental to the magnitude of the work in progress. At the present time the life are dropped in Trellawny's end to the 236, and Crease's shaft to the 238; and the water is in fork to the 236, all below the adit. The further examination of the parts of the mine laid dry since the last meeting fully bear out the statements made by those previously acquainted with it. Both on the east and on the west sides of the old workings deposits of tin of considerable value have been found—in the 225 and 236 on the east, and at the 194 on the west. Those on the east have not yet begun to be worked, because the drainage has not yet been sufficiently advanced to allow of it. The west is now in course of working, though no tin raised from it has yet been included in the returns. Every exertion continues to be made to push on the workings as fast as the nature of the ground and the number of men which it is possible to employ economically, allow.

Wheel Metal has not been so productive as it was at the commencement of the year, or even in the three months ending June last. This circumstance, though much to be regretted at the present moment, is not however, in the opinion of the committee, of a nature to give rise to any serious anxiety as to the prospects of the mines. It appears to have arisen from the westerly direction taken by the line of junction of Trellawny's and Metal lodes, where the largest course of ore has been discovered. At the 90, this line was struck in the engine-shaft, and a large deposit of tin was found in and near the shaft at that level, which was raised in the end of last year and the beginning of this, but as the level has been extended westward, the lode has again begun to diverge, and the 100 is still a short distance from the point of union. The size of the lode, the quantity of tin contained in each of them, and the general character of the ground, lead those experienced in mining matters to expect that when the line of junction is again reached at the lower levels the returns will not be inferior to the past. That they should continue for many months to defray the great outlay accompanying the drainage of the old mine, as they did the early part of this year, is more than could have reasonably been anticipated. For details of the working of the mines generally, the committee must refer to the manager's report.

Since your last meeting, three of the committee, Mr. Truman, Mr. V. Neale, and Mr. Noakes have spent several days at the mine, in order personally to investigate on the spot both the particulars of the expenditure and the present state and prospects of your property. The result has been to confirm them in the conviction of the value of that property, and the solid ground of the expectations hereon set as to the results of working the old mine, and also to satisfy them that the large sums expended have both been honestly applied, and have been so laid out as to secure the efficient and economical working of the mines in future. As one circumstance corroborative of this conclusion, they may mention that all the levels driven by the present company are of a height and width sufficient to allow of rails being laid down for the conveyance of the trucks, and that rails are extensively laid down along them. At the same time, these gentlemen are of opinion that in some particulars of expense a saving may be made without injury to the efficiency of the works, and that by a more judicious management of the mode of sinking the shafts, it will be possible for the committee to exercise a more thorough supervision and control over the expenditure than has hitherto been practicable. The committee propose to investigate this matter thoroughly without delay, and feel that in doing so they will have the full concurrence and assistance of the manager in whose seal for the promotion of the interests of the company, and practical ability in the management of the mines, they desire to express their entire confidence. The statement of accounts already circulated will have prepared you for the necessity under which the committee regret to ask themselves of asking you to make a further call to provide for the outlay on the mines. The actual amount of liabilities known at the present time, after deducting the balance now in hand, is in round numbers 14,400*l.*, which the cost since incurred, but not yet exactly ascertained, will increase to at least 17,000*l.* To meet this liability, the committee propose to you to make a call of 12*l.* 6*l.* per share, which will produce upwards of 18,000*l.*, payable in two instalments, one of 7*l.* 6*l.* in the course of one month, and the other of 5*l.* per share in the course of two months from the present time. The agreement with the Portland Trading Company, referred to in the last report, provides for the efficient discharge of the liabilities of the mines into the sea at Portland, the Trading Company continuing the necessary works for that purpose, 1000*l.* of the before-mentioned liabilities arises under this agreement. Since the last meeting the committee have deemed it advisable to increase their number by the addition of Mr. George Noakes, who is already known to many of you, and whose practical experience and personal knowledge of the mines will, they have no doubt, render his services of great value to the adventurers.

In conclusion, the committee express their earnest hope that the unexpected delay and cost in the completion of the drainage of the mine will not shake your confidence in the management of the undertaking, and that the committee may be able to assure you of their own unabated confidence in its ultimate success, of which the large interest in the adventure continued to be held by them may be referred to as an unimpeachable evidence. In fact, the prospects of success never brighter; the last three months have not only brought us much nearer the goal of our expectations, but have added most important confirmation to the truth of those statements on which we have always relied. At four successive points—the 194 on the west, the 154, the 225, and the 236 on the east side of the mine—tin has now been found in the mode of sinking the shafts, and the 236 a rich lode of 7*l.* wide, is now laid open, and before your next meeting, this ground and that above it, as well as that on the west of the mine, will, in the ordinary course of working, become available to increase the returns.

Even without Wheel Metal, the committee believe that Wheel Vor will yield an ample remuneration for the capital laid out, great as this has been. And although Wheel Metal at this moment is less productive than it was a few months since, there is no reason for believing it to be in any way exhausted; on the contrary, there is good reason for thinking that it will prove in future as it has done hitherto, to be the richest and most promising tin mines in the county.

A statement of accounts, which appeared in the Mining Journal of Sept. 12, was taken as read.

Mr. H. P. CREASE (the manager) then read his report, as follows:—

Sept. 11.—The following events have taken place during the last quarter in these mines:—The plan adopted at first for the effectual drainage of the deep works and exploration of the different lodes has been actively carried out, with such variations only as were the natural consequence of the varying incidents of so large an undertaking. The surface drainage and leading roads have been kept in good repair, and extended as necessity required. The pumping and winding-engines have been working well, the stamps only requiring any repairs of importance. The surface works are in a state bordering on completion. The steam-stamps engine and appendages have been done good work, but require some considerable repairs, and some alterations on the south side, and the cylinder with the complete set of the work now on hand on the tin dressing-floors, with a new calender and flume, will set the whole in good working order for returning a very large quantity of tin. We have raised and sold 138 tons 14 cwt. 2 qrs. 23 lbs. of tin in the last three months, which produced 11,028*l.* 12*l.* 3*l.* The quarterly returns would have been much greater but for the temporary falling off of the tin in the lode at Wheel Metal shaft and some of the stopes, arising, it is believed, from the course of tin having taken for a while a westerly dip, and from some of those passing variations in the stopes which we have met with since. Next in the report of the committee is the tin raised in the return to the higher value. The drop or difference in the price of tin, the inability to operate on the more valuable tin ground in that portion of the main lode already drained, owing to the necessity of previously removing a vast quantity of rubbish and old timber at Trellawny's, Crease's, and Boulder shafts, and bringing down the skip rails—in the latter sufficiently deep for the discharge of the tinstuff from portions dry—as well as the delay in draining to the richest and deepest parts of the main lode, from which large quantities of tin would have been obtained, have all combined to retard the increase of returns which would otherwise have naturally resulted. Boulder shaft is lately worked with massive timber as deep as the 214 with skip rails and guides, the skip drawing now from that level. The shaft has been examined from the 214 to the 236, to which depth it will be made a good shaft by continuing the present course of operation, cutting it open to make it a sufficient size, and securing it with strong timber—an operation which will be effected in about two months. In the meantime, every exertion is being used to cut the necessary ground, and fix the bobs and rods in this shaft and in the 174 fm. level from Crease's, to drop pitwork, and drain the tin from the old mine by Boulder shaft. The drainage of the deep workings has continued to claim our constant attention and utmost exertion, and although every effort has been used to reach the 236 this, the number of impediments we had to encounter prevented us doing so before this meeting. At this point, as far as our brief examination has extended, we have a good lode, 6 or 7*l.* wide, from which rich tin in considerable quantities will be extracted. As far as yet seen, it fully bears out the general report respecting it. The bottom of the level is still undrained, and here the richest part of this course of tin is reported to exist. At Crease's shaft, we had to remove a vast quantity of stuff and timber, to cut a great quantity of ground to lessen the impediment for the better fixing of the pumpwork, and the working of the main rod at the shaft, and to place carriage and wheels at the angle for carrying the same; also to fix a plunger-lift complete in the 214, and main rod from the 124 to the same level, as well as a drawing-lift in the 225; and the drop-lift to the 236, to which level the water is now drained. The winch-shaft has been raised and divided as deep as the 204, and the winch kibble now discharges stuff from that level. The engine-shaft has also been deepened to the 227, for sending down pumps for the drop-lift. The present drop-lift will be continued to the 218, or bottom of Crease's shaft, to enable us, as soon as possible, to continue driving a cross-cut from the engine-shaft, to enable us, as soon as possible, to continue driving a cross-cut sufficiently deep to enable us to sink a winze from the 236 to the 248, for laying open tribute ground, and for expediting the bringing down ultimately of Crease's shaft on the course of the lode, in case circumstances should require it. At Trellawny's shaft, a great quantity of ground had to be cut, and strong timber fixed to secure the same in the 204 and 214 fm. levels, a considerable amount of stuff and timber in the 214 and 225 to be removed, the shaft ceased and divided to the 204 for the winch to discharge stuff from that level, three pieces of main rod sent down and fixed, a plunger-lift completed in the 214, and the drop-lift sent away to the 236. As soon as convenient a temporary draw-lift will be fixed in the 236, and the drop-lift sent to the 248, and thereafter changed into a plunger-lift. Our greatest charge and expense is incurred in these shafts and in Trellawny's shaft.

We are glad to be enabled to report that the ground drained of water and laid open from the 194 to the 225, and as far as seen to the 236, is equal in value to what anticipated to find. In the 236, on the main lode (reached by a cross-cut south from Crease's, 9 fms. 3*l.*), there is, so far as the brief interval since the discovery has enabled us to see, a good course of tin in the whole ground to the east of Crease's. Right above it (giving 11 fms. back), in the 225, on the main lode, and reached by a cross-cut, 11 fms. 4*l.* long, from Crease's, is a good lode of tin, opened on for 14 fms. long, and worth 30*l.* per fm.

At Boulder shaft, the stopes east in the back of the 214 are fair tribute ground, and employ a large number of tributaries, with a good profit to the adventurer. In the 204 east and 194 west, on the main lode, which is worth over 30*l.* a fathom, there is every indication of our getting a quantity of tin and paying tribute ground. By a cross-cut (called Date's) driven south about 4 fms. in the 194, the south part of the lode is reached, and the 194 is reached by former workers, and a winze sunk on it 15 fms. below the level; the lode in the winze is worth 55*l.* per fm. A few weeks since, in cutting open

the side of the level east of Date's cross-cut, to prepare for sinking the winze, we discovered a part of the lode lying still further south, on which we are now extending the level east, and find it to be worth full 30*l.* per fm., with every appearance of giving large returns when sufficiently laid open. It is a bright light from this lode will be sufficiently on to admit of the winze being sunk. This point is the more important from its being in whole from this (the 194) to the bottom of the mine, and will be intersected at the most available point by short cross-cuts. In the 161, east and west of Silvester's cross-cut, on the north part of the lode, good tribute ground is now being operated on. The south part of the lode in the 154, east of Neale's cross-cut, is a good course of tin, worth 30*l.* per fm. In the 144, about 35 fms. west of Boulder shaft, we extended a cross-cut south to a south part of the lode, and driven on it east about 17 fms., the last 5 fms. in a lode worth 10*l.* per fm.; as it advances eastward, the level opens fair tribute ground.

TRAILWAY'S SHAFT.—The 194 is extended west, and only a few fathoms beyond Boulder cross-course, where we find the lode to be of great width, parts of which produce rich work for tin, worth upwards of 40*l.* per fm. The ground from the back of this level to the 174 is good tribute ground, and when sufficiently cleared of stuff to be operated on, will augment the returns. All the points mentioned above, except those now in working as deep as the 225, will be operated upon in about a month, and from the 225 to the 236, in about two months from this time. Here we would remark that the lode in the 194, west of Trellawny's, from its character and size, is deserving of special remark, particularly so from its being in the centre of an immense piece of high ground, standing in whole from the 60 to the 248; and as soon as the importance of the discovery in this level will warrant, intermediate levels will be taken up to thoroughly develop this part of the mine. No time will be lost in effecting it, though it is prudent to bear in mind that, however rich a discovery may be, time is required to fully develop it. From six to nine months will probably elapse before we reach the bottom of the mine, and have the skip brought down to the bottom of Boulder shaft, to take off the tinstuff from the high ground east and west of Boulder shaft from the 236 downwards, and from those portions of the lode we saw from the 154 to the 236; probably the latter operation may even be longer. The 115 cross-cut north, on Woolf's counter towards Truman's lode, has been extended from the main lode 12*l.* fms., and is now 121 fms. from main lode. From the nearest available calculation, there are from 4 to 5 fms. more to drive to cut the lode; but from the angle of underlay from the 30 to the 40, on Truman's lode in the Sand-bank shaft, being a little flatter than above, we would remind you that a difference of only 3 in. in a fathom will throw the lode 3 fathoms further north, and would consequently make that further to drive. From the character of the ground and the quantity of water, we have every reason to believe the lode is not far distant. This work being pushed with the utmost vigour, in order to reach it in the least possible time. A good discovery here will very much enhance the value of the property.

TRUMAN'S LODE.—Edward's engine is removed to Sand Bank shaft, and is discharging stuff and water therefrom. The shaft is sunk to the 40, and as soon as the necessary ground is taken down to prepare for sinking below, it will be at once commenced, and communicate with the 115 cross-cut without a moment's delay. The lode at the shaft, in sinking from the 30 to the 40, was of great width, containing rich leaders of tin, which, from its character, only require to be sunk a greater depth to be of more value. In the 30, about 35 fms. west of Sand Bank shaft, a winze is sunk about 3 fms. in a large strong lode, containing rich tin, and in all probability will be found of greater value by continuing it in depth. In the 30, west of Cull shaft, the lode is of great width, producing stones of tin and copper—a promising lode. A 20 fm. level on this lode is extending east of Powder-house shaft, for the purpose of cutting open the ground and communicating with the tribute pitches which are in the 10 and 30 fm. levels. The tribute department, on main lode and Truman's lode, consist of 32 pitches, employing 50 men, at tribute varying from 1*l.* 6*l.* to 1*l.* 10*l.* in 1*l.* As in Wheel Metal, the tribute department is being stopped on tubwork.

WHEEL METAL.—The engine-shaft is sunk 6 feet under the 100 fm. level, and the pumps are now engaged cutting ground for trip plat. This will be completed, the lift fixed, and the shaft commenced to sink, in about a month from this time. The shaft is set to sink by twelve men to the 110, at 18*l.* per fm. The 100 east has been extended about 3 fms., and will be resumed as soon as the sumpmen have completed the trip plat. The 100 west is driven 5 fms. 1*l.* 5*l.* in; in this end the lode is large, letting out an increased quantity of water, and promising the usual indications for the near approach of a valuable lode, in all probability a continuation of the rich course of tin in the stopes in the bottom of the 90. Our opinion is, that by sinking the shaft from 10 to 15 fms., or even a less depth, a new run of tin ground will be discovered; this depth is probably required to take the dip of the tin ground that may be brought down by the lead branch, which has been invariably accompanied by deposits of tin. Although this course of tin at present has a westerly dip or inclination, yet our opinion is that at the greatest depth named (15 fms. below the present bottom) this will unite with another lead of tin ground (indicated in my reports from the commencement as likely to exist) about Boulder and Wheel's cross-course, and parallel to the great tin deposits on the main lode.

The 90 fm. level west has been extended 7 fms. 5*l.* 4*l.*, and is now 23 fms. 0*l.* 2*l.* from the engine-shaft; for this distance we have had a rich course of tin; in the present end the lode is worth upwards of 40*l.* per fm. A winze is brought down from the 90 and communicated with this level, laying open rich ground for stoping or tubwork. The 90 east has been extended 6 fms. 5*l.* 3*l.* in, and is now 17 fms. from the engine-shaft; this level has passed through some good tin ground, but in the present end, from a change in the character of the ground, the lode is discarded. A winze is brought down from the 90 and communicated with this level, and laid open valuable tin ground, now stoping on tubwork. At the engine-shaft, about this level, the junction of Metal and Schneider's lode occurred, and the result was a very rich course of tin, which still continues westward, in a lateral and downward direction; and although the lode eastward is discarded by patches of the country rock occupying the place of tin in the lode, and termed by miners horses of ground, we expect it will pay for working eastward. To ascertain the actual dip of the tin around this junction in time for the meeting, and enable the proprietors to judge of the tin quantity on this important point, some excavations have been made in the bottom of the 90, west of the engine-shaft, where we have a rich course of tin, worth 80*l.* per fm. This has been effected for the same amount of money, and in the same manner, as if left to be wrought twelve months hence. The slope in the back of the 90, west of shaft, is a valuable course of tin, worth 60*l.* per fm. The 80 fm. level has been extended east 2 fms. 2*l.* 4*l.* in, besides rising and communicating with the winze from the 70, or level above, and is now 30 fms. from the engine-shaft; this level has laid open valuable tin ground for the whole distance, and the back over is now being stoped on tubwork. The 80 fathom level has been extended west 7 fms. 4*l.* in, and is now 43 fms. from the engine-shaft; the greater part of this distance the lode has been found highly valuable for tin, both in the back and bottom, and is now stoping on tubwork; in the present end the lode is less valuable, but from the rich course of tin passed through in the 70, beyond this end, we are daily in expectation of an improvement. In the 70, a little to the west of this end, a winze is commenced to sink, in a good course of tin, for the purpose of cutting open the ground for tributaries, and ventilating the level below. The 70 fm. level has been extended west 5 fms. 4*l.* 2*l.* in, and is now about 60 fms. from the engine-shaft, the greater part of this distance the lode is large, containing rich leaders of tin, which, from its character, only require to be sunk a greater depth to be of more value. In the 60, west of shaft, has been extended 4 fms. 1*l.* 6*l.* in, and is now about 90 fms. from the engine-shaft; this level in several places passed through rich bunches of tin, and one more particularly, near the present end. I would here remark that in the western levels, from the 60 to the bottom of the mine, rich courses of tin continue still to exist, and though on the whole not as valuable as for some months past, will continue to yield a large quantity of tin, and in all probability will soon resume former productiveness.

SCHNEIDER'S LODE.—The 90 west has been extended 6 fms. 1*l.* 2*l.* in, and is now 19 fms. 1*l.* from the engine-shaft; this driving has been in a rich course of tin, and the lode in the present end is worth 55*l.* per fm. The 80, west of cross-cut, has been driven 1 fm. 3*l.* 9*l.* in, and is now about 20 fms. from that point. A winze is brought down from the 70, and communicated with this level, for expediting the sinking of John's shaft, and ventilating the 80. The 70 has been driven west of the cross-cut 5 fms. 4*l.* 4*l.* in, and is now from that point about 40 fms., for the greatest part of this distance in a good course of tin, now stoping on tubwork—in the present end the lode is worth 45*l.* per fm. The 60, west of John's shaft, has been driven 6 fms. 5*l.* 3*l.* in, and now about 11 fms. from the shaft; for this distance the lode is large, containing rich leaders of tin, which, from its character, only require to be sunk a greater depth to be of more value. In the 60, west of shaft, has been extended 4 fms. 1*l.* 6*l.* in, and is now about 15 fms. from the shaft; for a part of this distance the lode has yielded good work for tin, and laid open tribute ground. John's shaft is cut open, cased, divided, and made complete from the 30 to the 60 fm. level; this shaft will be continued down as fast as possible, in order to discharge a part of the stuff from the deeper workings, which otherwise would have to be drawn through Wheel Metal shaft, and for the drainage of mine, when it may be found necessary to fix the required pitwork, and erect a powerful engine for that purpose. As soon as practicable, we shall bring down the shaft, and ventilating the levels in succession, that are now being extended towards that point. The cross-cut north in the 70, on the lead branch, towards Vanittart's lode, has been driven 13 fms., and is now about 30 fms. from Metal lode, leaving about the same distance to intersect the lode.

The number of persons employed in these mines are as follows:—Men, 760; boys, 240; girls, 230; total, 1230. The average gettings of the tubwork men 3*l.* 13*l.*, and tributaries 4*l.* 10*l.* per month. The cost for the next three months will, it is estimated, be about 18,000*l.*, and the returns for that period from 180 to 190 tons of tin, in sinking this report, I would observe that, great as the delay and expenditure have been, an enormous substantial progress has been made towards the ultimate object, the most formidable obstacles to success have been overcome, and the goal of all our wishes is now almost within our grasp.

Mr. COLX COLX enquired whether the accounts of liabilities estimated for the next three months included merchants' bills, and whether Messrs. Harvey and Co. did not principally supply the mine?

expended, but this arose from the magnitude of the works, and the substantial manner in which they had been executed, in which the shareholders would be well satisfied. With regard to the prospects of the mine, they were never more satisfactory. The statements made as to the tin to be found at the different levels had in every case been confirmed as these were drained, and this was the true ground for confidence in the future. At Wheal Metal, there was every reason to consider the falling off of the lode temporary only, and he had no doubt it would shortly become as rich as ever. Mr. Stoddard withdrew his amendment, and the call of 12s. 6d. was carried. Mr. Noakes said it was only justice to Messrs. Harvey to state that they had repeatedly informed the board that if the company could be served cheaper and better, to withdraw the orders from them. Mr. Cole suggested that in future the meetings should be held at 1 o'clock instead of 2, as many of the shareholders came from Exeter, and were anxious to return the same day. The Chairman assured the meeting that in future they should be held at 12 o'clock. The committee and auditors were then re-elected, and the proceedings terminated with a vote of thanks to the Chairman, directors, and manager.

MINING NOTABILLIA.

[EXTRACTS FROM OUR CORRESPONDENCE.]

URANIUM.—Pitch blende (oxide of uranium) has again been found, in an east and west copper lode, at Treowen, in the parish of Withiel. Though it may not be of any commercial value, from the small quantities procurable, still its existence should be nevertheless noticed in a publication of so scientific a purport as the *Mining Journal*. Several fine stones of this mineral were found in a neighbouring north and south iron lode, a short time since, which were worth 7s. per lb. It is much valued for porcelain and china painting. A demand exists for it, if any one can procure it.

REID AND O'NEILL'S PATENT FOR THE EXTRACTION OF COPPER FROM ITS ORES.—The experiments on the copper ores of the Ashburton district under this patent will be resumed shortly on a large and more comprehensive scale, under the superintendence of Mr. A. Reid, one of the patentees.

MR. BAKER, ASSAYER AND MINERALOGIST, who was sent by the LONDON AND VIRGINIA GOLD AND COPPER MINING COMPANY to his mine was, at the last advice, building a small laboratory, which was about finished, and had erected a baffle. He went out with instructions to assay every part of the mine for gold, silver, and copper. Hitherto the returns of gold have not been remunerative; but, as they sink deeper, the indications of copper are such that the opinion prevails that it will prove valuable for a copper mine. Some parcels of copper ore, which have been sent to this country from the mine, have been worth 23s. per ton. Mr. Clement, one of the new directors, has great confidence that the mine is a valuable property, from the size and nature of the lodes, which have been found to correspond with the reports. Mr. Baker's report may be expected some time next month.

WHEAL ZION MINING COMPANY.—Mr. Stockwell, of Broad-street, has summoned Lord Charles Clinton, one of the largest shareholders, and Mr. Alfred Jeffries, the secretary, for certain malpractices with regard to the shares. The prosecution has been instituted at the instance of Mr. T. W. Stubbs, likewise a large holder: the complaint being that shares have been transferred without a consideration, in order to constitute a fictitious majority at a general meeting. The case will be heard at the Mansion House to-day. For a considerable period there has existed a great antagonism between the parties connected with this mine, much ill-feeling has been displayed, and a *malus animus* shown on both sides; not being able to settle their disputes in the board-room, they have now adjourned to the Mansion House; this step may cause further notoriety, but we question whether it will be conducive to the benefit of any concerned.

MINING IN DEVON.—Seeing an article in the *Journal* under this heading, and hearing so much about a valuable discovery having been made on the spot named, I was induced to visit the place, when I found miners at work driving west from the River Dart, with the fortunate Capt. Williams on the ground. I proceeded to the bottom of the pit where the men were at work, and after examining the lode, which is composed of yellow and black copper ore, with a beautiful look against the hanging wall of the lode, rich for copper, and under the lookan from 20 in. to 2 ft. wide, worth at least 12s. per ton; and further south, towards the footwall, a good grey work. The lode is about 6 ft. wide, worth at least 40s. per ton, or it may be worth much more. The clay-slate in which the lode is embedded is as good as any miner can reasonably wish for. —A MINER: Ashburton, Sept. 16.

TAVISTOCK AND ITS NEIGHBOURHOOD.—HINSTON DOWN MINE, at the next meeting, will again resume making dividends: although Capt. Richards, in his report of Sept. 10, says there was no change of importance, yet the lode in two of the ends—the 75 and 65—is worth 4 tons of good ore per fm. Since that days these ends have improved, and will pay the persevering shareholders. —WHEAL EDWARD (the mine adjoining) I am confident will at the next meeting be placed in the Dividend List; it looks well. —CALSTOCK CONSOLS is rapidly improving, and will, no doubt, prove a good mine. —DEVON AND CORNWALL UNITED MINES are looking remarkably well, and will at the meeting declare its first dividend; thus showing that perseverance in legitimate mining will always ensure success. —WHEAL ROSEBURY is very much improved, so much so that their two monthly samplings will be very near 100 tons of ore, and the shaft will be down to the 75 in October, where the junction of the two lodes meet, when permanent results may be reasonably calculated on. The 62 end east continues to hold good; this being the furthestmost end east looks well for the backs as well as in depth. This mine appears in a good position to pay its cost, and follow some of its fortunate neighbours. —GAWTON UNITED is looking better, —TAVY CONSOLS is paying cost; the shaft is sinking below the 80 in beautiful soft siliceous ground, and I should think that the slightest improvement would place it in a very enviable position of paying a dividend. —AT LADY BERNIA, I find the shaft is down to the 30, which will soon bring this mine to the notice of mine investors. I think, Sir, you will agree with me that this part of the country will resume its old position, and many prejudices which existed be removed. —AN OLD HAND: Sept. 17.

TREDDOL.—It is reported that these mines, which are the property of the Rev. H. Jones, Mold, Flintshire, are again to be worked under a respectable party. The lodes have from time to time produced copper, of which many tons have been sold, but it is thought that in depth they will turn out to be lead. Such changes are not uncommon in the lead districts, and when strong lodes have copper backs they seldom fail to remunerate the adventurer in depth, if carried out in a miner-like spirit. The Bryn-Arian Mine, which is in the same neighbourhood, was formerly managed by an old and experienced miner—Capt. Trevethan; this lode made copper backs, and produced lead at least 12s. per ton; and further south, towards the footwall, a good grey work. The lode is about 6 ft. wide, worth at least 40s. per ton, or it may be worth much more. The clay-slate in which the lode is embedded is as good as any miner can reasonably wish for. —A MINER: Ashburton, Sept. 16.

SOUTH CLIFFORD UNITED.—The new shaft is now complete to the adit level, about 20 fms. in depth, which has given ventilation, and enabled the driving on the lode to be resumed.

WHITCHURCH DOWN CONSOLS.—Some time since I was passing over Whitchurch Down, and saw some men working, and believing at the time they were easting, I was induced to go and see what they were about, and found them raising stones for a road near by. I discovered they were upon a lode from 6 to 8 ft. wide, which I at that time noticed in your valuable *Journal*, since which two parties have been opening upon it at various places, and this morning I have been on the Downs (now named Whitchurch Down Consols) with Mr. Hill, of this place, and find they are sinking a shaft upon the course of a very promising lode, from 7 to 8 ft. wide, taking its direction about 10° south of east, with a fine greenish black, and occasionally spots of black ore. This lode, there can be no doubt, is a continuation of Chollacott and Crowndale lodes, and I believe at a shallow depth will produce a quantity of ore. The latter mine is now being re-worked by the Devon Great Consols adventurers. —C. WILLIAMS: Trestock, Sept. 17.

HUCK WORTHY BRIDG.—I was over this property on the 10th inst., and underground. The mine is looking splendid. They have driven through 40 fms. of rich copper ore ground, and from the present promising and satisfactory appearance it will prove, without doubt, a lasting and profitable mine.

THE NANTLE VALL SLATE COMPANY.—This company is now in the course of winding-up in the Court of Chancery, and the whole of the property will be submitted for sale, by auction, by Mr. Wm. Daw, at Carnarvon, on Sept. 30. The Ty-mawr Slate and Slab quarries are situated in the parish of Llanfyllin, near Carnarvon, embracing an area of about 75 acres, having 430 yards on the course of the vein, which exceeds 600 ft. in width. The property is subject to a royalty of 2s. 6d. per ton, with a proviso that the same shall not be less than 100s. per annum. There is also the privilege of using a tramway over certain fields in the locality, to enable the proprietors to deposit the refuse of the quarries on the banks of the Nantle Vall Lake. The lot includes a large amount of machinery necessary for working the property. The sale takes place, with the approbation of the Master of the Rolls, under the usual conditions.

NORTH TAVY.—A tin lode has been discovered here extending from the 30 to the 20 fms. levels, and of considerable length, which will materially alter the prospects of this mine. A large quantity of stuff now lies at surface, raised by former workers many years since, which will now be well worth working.

MINING IN CALIFORNIA.—(From a Correspondent.)—There is nothing surprising in the fact of Californian gold mines having proved unremunerative in the hands of English companies, as the yield is far less than usually supposed. Taking five parcels from Missouri Hill, four from Sebastopol, one from Allison's Ranch, one from Houston Hill, eight from Gold Hill, one from Osborne Hill, one from Ophir Hill, one from Massachusetts Hill, one from Rose Hill, and one from Ophir, amounting together to 1228 tons, only 4157 lbs of gold was produced, being at the rate of 51 1-5 per ton, or reckoning for the difference between the English and American ton, would be about 4s. 6d. per English ton. From equally authentic data, and the reports of those most extensively engaged in quartz mining operations at Grass Valley, the belief is arrived at that, taking all the rich mines now being worked together may be fairly stated at 220 (41. 4s.) per ton. A rich mine of copper has lately been found about four miles from Pittsburg, and between Pitt and Cloud Rivers. The specimens which have been exhibited are very rich. Some gold is said to be mixed with the copper ore. From the highland between Grass Valley and Rough and Ready, a large expanse of the plains and the Marysville Buttes are visible. To the north and east of the town, and at a number of places along the road, a large amount of hydraulic mining has been carried on. Seventy-five cents per inch here has been paid for some of the water used in these claims. The Oregon papers contain plenty of information on the Colville Mines. It is said that about the mines on the Pen d'Orellie River a man prepared to mine, and willing to work, can make from 4 to 50 per day. The tedious and expensive process of tunnelling is being superseded by the use of steam-engines.

ROYAL COLONNUS.—This popular exhibition is now pursuing a successful career. In addition to the panorama of London by Day and Night, and the cyclorama of Lieben, Mr. George Buckland, the well-known humorous vocalist, introduces two new entertainments, illustrated with dissolving views and descriptive music and songs: these are—"An Hour at the Antipodes," and the "Baronial Halls of England," which are given alternately. Among the attractions of the evening is a promenade concert, the vocalists being Mesdames Cohn, Blenden, and the Swiss Cottage orchestra, and the instrumentalists, as well known to the former habitués of the building, still maintain their ancient celebrity. The entertainments are of a varied character, and as they rapidly follow in succession, the visitor has not the inconvenience of the long pauses, which so materially deter from the general pleasure of places of amusement.

MINING IN IRELAND.

[FROM A CORRESPONDENT.]

This subject has for some time been in comparative abeyance. The splendid mineral properties of the sister kingdom are now likely to attract more capital and attention than they have hitherto received.

The great fault in Irish mining has been the selfish cupidity with which operations have been conducted, both in the mines' first introduction to the public, and in the subsequent workings the same self-aggrandisement has been manifested. True, this does not apply to all, but is acknowledged to be the great and general bane. In the case, for instance, to which allusion was made in the *Mining Journal* of Aug. 29, out of a capital of 20,000l. only 5000l. was expended in the mine—a fact which ought, in all fairness to Ireland, to be explained, and which is plainly shown by the plans and sections of the works. A reference to these same authorities also give evidence of a mistaken system of working, by sinking on slides where no ore is usually found in that district, instead of sinking an engine-shaft from the surface to 40 fms. depth, which might have been done at a trifling expense, the whole of the ground having been worked but about 6 fms., which is all the new ground required to be excavated, a small engine would then have lifted the water to the deep adit level, about 16 fms., and the ground known to be productive laid open at once; instead of which 24 men were employed night and day continually, at an enormous expense—nearly 60l. per month—and then ultimately obliged to discontinue, the water being too quick for manual labour. Can such methods be called giving a mine a fair trial? Whilst the mine was at work, as soon as a bunch of ore was discovered, no pains were taken to make the most of it, by under cutting and throwing open ground to work it away on tribute, and in the cheapest possible manner. Nothing would suit the adventurers but at once raising every pennyworth they could reach there and then, without any attempt at prosecuting discovery. Is this fair mining? This is but an example of the way Irish mines have been wrought. Were this practised in Cornwall, many of their dividend mines would occasionally have been ruined. It is true policy to keep a "nest-egg" in reserve; lodes cannot be expected to be always productive. If greedy adventurers will exhaust discoveries as fast as they are made, without properly prosecuting and developing the ground, mining in Ireland, or anywhere else, must soon finish itself. If 15,000l. out of 20,000l. be absorbed above ground—as in the case mentioned—neither the mines nor the public have a chance; if boards of management will not act as competent agents advise, why employ them at all? why go to the expense of salaries? why not divert all the operations from the London or Dublin offices? Such modes of action do not constitute mining, even in the worst sense of the word.

If the opinions of some of the most experienced, best, and most honest judges of mining pursuits, of mineralogists, and geologists, are to be considered of value, no hesitation or doubt can be entertained as to the vast mineral resources; even if these be insufficient, the silent monitors, the veins themselves, by their produce, reveal the fact. It is, therefore, palpable the fault is not in the country, but in the manner of introducing and conducting adventures. As soon as companies shall be introduced who will apply sufficient capital, be modest enough to take a fair remuneration for their trouble. Landlords, allow liberal grants and low dues; committees work industriously; pay the men regularly, and let properly qualified miners work the mines; then will mining in Ireland flourish, and not till then. The dawn of that period will be hailed with pleasure; it must be adopted as a general principle, or mining will be expunged from the catalogue of Ireland's prodigious sources of internal wealth.

These remarks are offered in consequence of the paragraph referred to in the *Mining Journal*, and from a determination to put to the proof whether legitimate mining in that country (so much talked of and confessedly advisable) will be properly and deservedly supported, as some companies are being established on plans embodying all the above requirements, and excluding, as far as possible, the errors and faults of past experience.

MEMS. OF MINES AND MINERS.—No. XVII.

Capt. JAMES THOMAS is one of the oldest, if not the oldest, miner alive in Cornwall. Sixty years ago he was a working miner in Cook's Kitchen (who says mines are not worth seven years' purchase?), and afterwards for 30 years an agent at Dolcoath, with his brother Charles, father of the gentleman who now holds that important mine, as captain. The comrade and intimate friend of Rule, Trevethick, Joseph and Andrew Vivian, he formed one of the school that may be truly called illustrious. One fact is worth a thousand surmises; no foul-mouthed calumniators dare take these names on their lips; it would be heresy to do so. Capt. Thomas has the rare privilege to witness his three sons (of whom anon), to whom he gave a liberal education, in important situations in Irish mines. It cannot be a matter of surprise, under such tuition as they were likely to receive from father and uncle, that these captains should hold the stations they do, and to which we shall necessarily refer. Captain Thomas, although at a very advanced age, enjoys universal vigour and elasticity of spirits; his natural wit (descending to his sons) renders his conversation, filled as it is with historical anecdote, not only most amusing, but highly instructive. Mr. Burgess, whose memoirs we have lately published, is his ancient friend, and the two worthies may almost be classed as the remnants of the past. Long may they continue to us as examples of rectitude of conduct and sterling ability.

Messrs. JOHN TAYLOR and SONS (London).—These gentlemen are so associated with mining, that it would be impossible to separate the names, lest they be misunderstood. They have long stood as beacons in mine management, having conducted many of the most extensive mining companies the world ever saw, if not with exactly uniform success, with uniform ability and honour. Their success, however, has been pre-eminently, having had, and still possessing, mines yielding prodigious returns. Their names are hosts in themselves, forming a sufficient guarantee for whatever they undertake being carried out in the most spirited and careful manner. These gentlemen are extensive and liberal employers, paying every man under them a fair remuneration, without any wish to cramp his abilities or curtail his emoluments by a false economy. They thus secure more than the average amount of talent; when they find that the case, combined with proper attention, they seldom change. The employed look up to their employers as their patrons and friends—a good example, which ought to be far more extensively imitated. Their mining speculations have extended to almost all parts, but are now chiefly confined to Wales, where they have splendid properties. It is reported they are about reopening one near Lampeter, from which, under their care, the most brilliant hopes may justly be entertained. These are the kind of men calculated to benefit mining interests, and encourage miners. We wish they were more numerous than they are, then would no shafts of scandal be hurled, no discontented agents grumbling, fewer disappointed and angry shareholders (for such there always will be), and consequently greatly increased dividends. It is to be hoped their proceedings for the future may be marked by the same characteristics as the past. The best well-wishers of mining could ask or desire no more.

Capt. MATTHEW FRANCIS, a native of Goldsmithy, the son of the subject of one of our previous memoirs, received a liberal education, enabling him to take the distinguished position he now holds as an accomplished gentleman and consummately skilful miner: in him we see the two characters united. Capt. Francis, many years since, went into Cardiganshire, where he had the management of several mines, which were wrought profitably, and yielded large returns to the proprietors. His attention has been more particularly directed to the development of silver-lead veins, though his widely-extended experience have given him ample opportunities, of which he has not been negligent; his opinion, especially on Welsh mining, is much in request. As an engineer he has distinguished himself, and the annals of mining have been embellished by the labours of his pen. Capt. Francis has the management of several silver-lead mines in South Wales; amongst them Llwynmales, Egnair Mwyn, Abbey Consols, and other promising mines, the latter of which had been worked at a very remote period, and now holds out fair prospects of success.

Capt. WILLIAM THOMAS (Ireland) is the eldest son of Captain James Thomas, for many years agent at Dolcoath, and first cousin to Capt. Chas. Thomas, manager of that mine, in which, after receiving a liberal education, he was brought up, where he had the very great advantage of being taught dialling, and the whole routine of the profession, by the most eminent miners of the day, as well as assaying copper, tin, and lead. In Dolcoath he worked for several years as a tributer—an admirable practical school. His first appointment as agent dates as far back as 1826, under the British United Mining Company, since which he has been much employed in examining mining properties in Staffordshire, Lancashire, Westmoreland, Cumberland, Wales, &c., &c. Upwards of 18 years' ex-

perience in Ireland constitutes him one of the best authorities of that country's capabilities, which need we believe is universally awarded to him. Coosheen Mine affords an example; as when he assumed the management the main lode had been lost by a slide having it. By his practice he was enabled to form an opinion which way the slide had thrown the lode. After driving a cross-cut 16 fms., at a cost of 300l., he discovered the lode, as he had anticipated, containing a splendid course of ore, of the rare variety for Great Britain termed malachite, some as large as 40 lbs. in a stone. Many thousands of pounds worth of copper were raised and sold hence in a short time. He has now, we believe, made arrangements for working some extensive copper and lead properties in the counties of Cork and Kerry, in which we wish and doubt not of his having good fortune. During the Irish famine, in 1846, Capt. Thomas established a fishery, thus being instrumental in administering to the wants of and preserving many poor people, some of whom are still alive in the country; others have emigrated to America, and done well there.

MINING IN JAMAICA.

The following are particulars of our mining advices to Aug. 26:—

THE CLARENDON CONSOLIDATED MINING COMPANY have advices to Aug. 24:—At Stamford Hill Mine, we are pressing forward as fast as we possibly can in our different operations. The slopes in the back of the 35 are producing but little ore; I have, therefore, decided on abandoning them. In the 46, north-east of shaft, the lode continues to present very favourable appearances; it is between 6 and 7 ft. wide, spotted with yellow copper ore throughout. In the same level, south-west of the shaft, the lode is looking more encouraging than when I last wrote, being about 5 ft. wide, with good walls, consisting of lookan, porphyry, spar, iron, muncie, and sprigs of copper ore. In the shaft sinking below the 46 the lode continues large, and maintains the same favourable character it has for some time past, being thickly spotted with copper ore; the bottom of the shaft is much harder, and consequently more troublesome for sinking than I have before seen it; I have, therefore, fixed three more Englishmen in this important place, which will facilitate our progress. The ground in the 36 cross-cut is also a little harder than it was for driving through. I propose sinking a small shaft from the surface down on this level for ventilation. —F. C. HARPER.

AT THE ELLENBIE AND BARDOWN MINING COMPANY meeting, Aug. 17, the accounts showed—Mine cost, £20,337.17s.8d.; 22 tons of ore shipped, estimated at 10l. per ton net, 220l.; leaving balance against mine, 31.17s.8d. This was considered highly satisfactory, as it proved they were raising ore nearly sufficient to pay cost. This company is one of those locally established, and notwithstanding the difficulties they have had to raise capital, have succeeded in bringing the adventure to within a fraction of paying cost. The lode at Salisbury Plain is, for a copper lode, one of unusual power; its great size and productiveness may be estimated by the fact that, in sinking upon it, it has yielded, from 3 to 4 tons of yellow ore, of an average richness; when broken up, and without any dressing whatever, of about 14 per cent. If such a lode as this was opened in a miner-like manner, they might send to grass from 30 to 50 tons of rough ore per week. To effect this, however, money is wanted to erect proper machinery, and which is the only cause that prevents this mine from taking its stand as one of the best in the world. As it is, with its present very limited working capital, it bids fair at no very distant period to become a dividend-paying mine.

Aug. 26.—I have little to add to the report relative to the mine, except that the level (Evans's) has been driven up and the mine holes. We commenced stinging on Monday, and I fully expect 50 tons will be on surface, dressed, by Sept. 30. Should the lode continue as rich as at present, 300 tons will not be the limit of our shipment in Jan., 1858. The committee have declined to sell any more shares, as we have funds in hand sufficient for 12 months' expenditure, if we did not ship 1 ton of ore during that period. We have shipped, per *Pioneer*, 3½ tons, on which effect insurance as formerly. It would be impossible to convey to you an idea of the excitement in Kingston respecting our mine. The day after our general meeting we sold 3000 shares, and have since received applications for 1000 more, in accordance with the resolution of the committee not to sell more. You will be governed by the following line of your disposal of any more shares in England. Resolved.—That the purser do instruct Messrs. R. Hastie Wilson and Co. not to dispose of any shares until further notice, other than those they may have already sold.

RIO GRANDE MINING COMPANY.—Mr. John Watson, who has been superintending the workings in Portland during Captain Arthur's absence in England, reports—Aug. 4: I have now ready about seven or eight barrels of ore at Brookdale, which we have commenced to take down, and will soon have ready for shipment, if weather permit. I have lately been working in a place about a quarter of a mile further east, on Lawrence's field, and on breaking the ground I find the same rich character of ore existing. I have taken this one stone of ore between 5 and 6 wts., and on breaking it at several places it shows beautiful quality. I have about three barrels more at the same place, and am very desirous you should inspect such a fine sample. You would be more than ever satisfied that it requires deep underground workings. The cross-cut continues very hard, and looks very promising. We have cut some small veins with grey ore in them.

Aug. 11.—I have sent on five barrels of ore in Mr. Abraham's boat, which left on the 8th inst., and have from three to four at Brookdale, besides eight or nine at Lawrence's field. Capt. Arthur has returned to the island, and has resumed his duties. At the WREAL JAMAICA COPPER COMPANY meeting, on Aug. 24, the accounts to July 31 showed a balance in favour of company, including estimated proceeds of ore shipped, 1380l. The report stated that the operations since the last meeting were prosecuted with the same degree of general success as had hitherto characterised the prospects of that mine. The best test of success will be found in the quantity of ore raised and sent to market. In addition to the 80 tons of ore shipped at the date of the last bi-monthly report, 16 tons have been since sent to market in the *Swift* and *Bellona*, and 11 tons are now on board the *Pioneer*, to sail in a few days. The actual quantity of ore, therefore, shipped in the first seven months of this year amounts to 107 tons. Wreah Jamaica Copper Company are producing 4 to 5 tons of ore per week.

Mr. E. C. Lewis, of Kingston, has forwarded an interesting description of the Hore Las Mines (a continuation of the old Spanish workings)—he says, "One encouraging feature in the mining line is there being no more of the old-fashioned white miners only to carry out the whole of this very creditable undertaking, strange as it may appear, the rest being performed by native labourers, from the girl or boy at 4½d. per diem, to the skilful mechanic, of course, and of whom the miners speak in high terms. Thus mining in Jamaica is not such an impracticable matter as some would have it believed, and this may be said to be an instance of well-directed capital and perseverance being crowned with success. I have seen assays of the ore yielding 72 to 75 per cent. of lead, and from 56 to 111 ozs. of silver to the ton of ore."

These advices more than confirm all that we have hitherto had occasion to submit on the progress of copper mining in Jamaica; and we shall at all times be most happy to impart any information in possession of any who may take an interest in a pursuit so fraught with importance to the substantial advantage to the island of Jamaica. The *John Griffin* and *Swift* arrived this week, and *Bellona* and *Pioneer* are on their way with copper ore from the island.—R. HASTIE WILSON and Co.

Mr. Crofts sends us the following review of the market:—

The writer ventured upon a prediction last week, to the effect that the market was on the eve of awakening from a long course of inactivity, the verification of which has come not slowly but suddenly, the past seven days having been characterised by a considerable accession of orders from the country in particular, both to sell and buy mining shares; and a peculiarly agreeable feature in the business has been the fact, so far as the writer's own experience is concerned, in realising profits on stocks recently bought, whilst the purchases made have been stimulated by simultaneous improvements in a number of concerns, among which may be mentioned Kelly Bray, Pender, Sorridge Consols, Wheal Edward, and, late in the day on Friday, Great Wheal Alfred, where, in the 170, they report the lode worth 18s. per fm., previously showing only "spots" of ore—notably, however, Vale of Towry and Catherine and Jane have been much sought after, the latter showing daily strong symptoms of becoming a most happy to impart any information in possession of any who may take an interest in a pursuit so fraught with importance to the substantial advantage to the island of Jamaica. The *John Griffin* and *Swift* arrived this week, and *Bellona* and *Pioneer* are on their way with copper ore from the island.—R. HASTIE WILSON and Co.

Mr. R. Tredinnick, of Gresham House, Old Broad-street, supplies us with the following information as regards the London Share Market:—

Mining will not at all times prove profitable at starting, but with the aid of science and practical experience no pursuit pays better, or offers the same inducement for capital: had there been no hazard associated with it, no such prizes would be gained as a Devon Great Consols, Friendship, Trevaun, Buller, Bassett, Dolcoath, South Caradon, or Levant, though only a few of the prizes, upon comparatively small outlays, which have transpired to encourage the hard-working miner to hope in his slow, yet certain, progress to success; discovery after discovery are continually being made to reward the industrious and enrich the enterprising; let us, therefore, benefit through experience, and profit by the present sound position of Cornish copper and tin mining enterprise. We would advise our subscribers to embark in well-selected dividend and progressive mines, situate in approved mineral districts, practically and economically managed, with capital subscribed and time expended in the development of lodes, with prosperous and analogous ones surrounding; when with patience, perseverance, and moderate outlay, success is certain to follow. Mineral does not grow at surface, therefore depth must be attained; and we trace nine-tenths of past failures as resulting at surface instead of opening out sections of lodes, sinking shafts, and cross-cuttings at such depths as mines usually become productive and remunerative.

PRICE OF MATERIALS.

As charged at ST. AUBYN AND GREVELL MINE during the following months:—					
Description.	March.	April.	May.	June.	July.
Coal, Cardiff	14s. 0d.	14s. 0d.	14s. 0d.	14s. 0d.	14s. 0d.
Coal, Newcastle	18 4	18 4	18 4	18 4	18 4
Timber, balk	0 10	0 10	0 10	0 10	0 10
Iron, common	10 0	10 0	10 0	10 0	10 0
Iron, crown	13 0	13 0	13 0	13 0	13 0
Iron, hoop	14 6	14 6	14 6	14 6	14 6
Steel, cast	50 0	50 0	50 0	50 0	50 0
Steel, H 2	50 0	50 0	50 0	50 0	50 0
Shovels, steel	50 0	50 0	50 0	50 0	50 0
Nails, patent 4 in.	19 9	19 9	19 9	19 9	19 9
Hoops	0 5½	0 5½	0 5½	0 5½	0 5½
Tallow	65 0	65 0	65 0	65 0	65 0
Grease	13 0	13 0	13 0	13 0	13 0
Oil, olive	7 0	7 0	7 0	7 0	7 0
Candles	7 0	7 0	7 0	7 0	7 0
Powder	51 0	51 0	51 0	51 0	51 0
Safety-fuse	0 8	0 8	0 8	0 8	0 8

CHEMICAL GLEANINGS.—No. IV.

NY RICHARD V. TUSON, P.O.S., P.S.A.

NEW METHOD OF PREPARING CRYSTALLIZED SILICIUM.—Prof. Wöhler formerly described a process for the preparation of crystallized silicium, which consisted in fusing aluminium with from 20 to 40 times its weight of fluo-silicate of soda at a bright red heat. The same chemist has since found that the latter salt may be dispensed with, and its tedious preparation avoided by fusing the aluminium in a Hessian crucible, with 5 times its weight of soluble glass, and 10 times its weight of cryolite, and keeping the mass in a fluid state for half-an-hour. For this purpose he uses the beautiful soluble glass from the factory of M. Kuhlmann, of Lille. The glass is powdered, and mixed with the cryolite, also powdered; the crucible is half filled with the mixture, a piece of aluminium is laid upon it, and this is covered with the other half of the mixture. In this manner dark, iron-black reguli are obtained, perfectly saturated with silicium; their surface is usually covered with shining three and six-sided plates of silicium. It is remarkable that the masses of aluminium containing silicium are not again fusible at the temperature at which they were produced. A globule of this kind may be heated to redness for a long time, without undergoing fusion or oxidation. If, while red hot, it be thrown into cold water, about half the volume of aluminium which the mass contains flows out as a coherent mass, which remains red hot for about a minute under the water; the silicium remains, however, in the form of a ragged, crystalline, porous globule. When preparing silicium by this process it is, therefore, better to submit the regulus to the above treatment before acting on it with hydrochloric acid, as by this means much aluminium is saved, which may be employed in subsequent operations.

ON THE REDUCTION OF CERTAIN SALINE SOLUTIONS BY ALUMINIUM.—M. H. Masson, like M. H. Deville, believes that aluminium, in virtue of its properties, should be able to displace iron and chromium. He has observed the reducing action of aluminium in certain saline solutions, more particularly, however, in those of nitrate of silver, nitrate of protoxide of mercury, protochloride and cyanide of mercury, chloride of tin, acetate of lead, and various salts of copper. These salts are nearly all reduced by aluminium.

NEW METHOD OF SPLITTING ROCKS.—A patent has been taken out for splitting rocks by heat without explosion. The mixture used for the purpose is said to be composed of 100 parts sulphur, 100 saltpetre, 50 sawdust, 50 horse manure, and 10 common salt. The saltpetre and common salt are dissolved in hot water, and mixed with molasses. The other ingredients are then added, the whole stirred until thoroughly incorporated, and the mass thus produced rendered fit for use by being dried at a gentle heat. The composition, prepared in this manner, is introduced into holes bored in the rock in the same way as blasting powder, and is ignited by means of a fuse. It does not explode like gunpowder, but generates heat of sufficient intensity to split the rock.

STEAM-GAUGES.—During this week a case has been tried at the Town Hall, Bolton, which is likely to create as large amount of discussion in scientific circles as took place upon the question, What is a water-gauge? The query now will be, What is a steam-gauge? The Government Inspector of Mines for this district (Mr. Dickinson) charged the defendant, Mr. Colville, with infringement of the provisions of the 13th section of the Act, having failed to provide a proper steam-gauge to a boiler at one of the pits. Mr. Hardcastle used, as he had done for some years, a "Salter's spring balance" and a safety-valve as a substitute for a gauge, and declined to adopt any other indicator. On the part of the prosecution, it was argued that no instrument could be considered a proper gauge unless the engineer could at all times ascertain, by looking at it, whether there was too much or too little steam in the boiler. He (Mr. Dickinson) did not make a point of recommending any particular gauge, leaving that to the discretion of the engineer. He said that the only operating gauge he thought was the best. The magistrate said that the real question was, whether "Salter's spring balance" measured the steam at every stage? If it did, he should say it was a proper gauge; if it did not, he should think it was not. Mr. Dickinson said it was neither more nor less than a steam-valve. Mr. Jackson, civil engineer and surveyor, was called by Mr. Hardcastle to prove that the gauge was a proper one; but his evidence completely supported Mr. Dickinson's views, he having shown that the engineer could not tell by it when the steam was at blowing-off point without using mechanical means. The magistrate, after having listened to the evidence, said they were of opinion that it was not a proper gauge, but as it appeared that Mr. Hardcastle did not wilfully act in opposition to the law, they should impose only the mitigated penalty of 1*l.* and costs.

BOILER EXPLOSION AT BEVERLY.—A fearful explosion took place at Mr. Rooker's Beck Side Mill. It was formerly worked by wind and water, and latterly steam has been added, whereby the engine driver, who was standing near the boiler, was so seriously injured that he died 30 minutes after the accident occurred. Mr. Weiburn, the millwright who erected the boiler and engine, gave evidence as to the cause of the explosion, and Mr. Brown, the coroner, gave evidence as to the facts of the accident was the deceased neglecting to keep the boilers supplied with sufficient water. This evidence was supported by Messrs. W. and J. Crosskill, and J. Patterson. The deceased left a wife and children. An inquest has been held, and a verdict returned by the jury.

BOILER EXPLOSION AT THE BRADFORD IRONWORKS, NEAR MANCHESTER.
—Yesterday morning a serious boiler explosion occurred at Messrs. Johnson and Co.'s ironworks at Bradford. The boiler was one of the largest in the works, being 22 ft. in length and 5 ft. in diameter, with a flue 2 ft. 9 in. in diameter. It was mainly used as an assistant boiler to the others, numbering 15, that are in these extensive works, and at the time of the accident the engineer, Joseph Cash, was firing up, and was blown some 20 yards down the shed. The poor fellow is very seriously injured, his legs, body, and face being dreadfully scalded and burnt. David Gregson, who was at the time near to Cash, is also very seriously injured, having got a wound in the head and much scalded and burned. A boy named Hayes has also received injuries, his head, face, body, and legs were very much scalded and burnt. Richard and Felix Johnson, the two sons of the owner, were also scalded and burnt. Gregson and Hayes were four were at once conveyed to the Royal Infirmary, where the three last named lie in a very precarious state. Other persons were injured by the explosion, but not seriously. Cash is said to have since died.

INDIA.—The deep interest with which every information concerning our Indian Empire is at this moment received by the British public, has induced a crowd of writers, on all possible various subjects, to seek the aid of the press in disseminating notions of how things are, or should be, in India. With much that was very familiar to us, we now learn much that is new, or which, at all events, has hitherto been known imperfectly. We may hope at least that from the dreadful doings, the reports of which have aroused the country from end to end to an unanimous feeling at once of deep sympathy and retributive determination, a better and happier state of things may spring, as affecting both the governors and the governed—that “from the milder danger,” which has so acutely stung, we may pluck the flower of future safety. For India, which has so long been a terra incognita to the British, we know the country, which, in its infinite variety and peculiarity of climate and resources, is indifferently known to the great bulk of even the best informed amongst us; and based upon this knowledge, the appliances of the best means of communication between the most important points, for the more speedy transport of the products of the country, and of such military forces as may for some time be required. The insalubrity of the presidential cities and chief seats of commerce for Europeans has operated strongly against the extension of the English race in India, and increased the dependence of the country upon the British. In India, as in the tropics, Europeans will find a climate more healthy and congenial, if possible, than that at home; to which ready access only is required to effect a rapid change in the numbers and condition of our countrymen in India. Mr. Hyde Clarke, who for many years has directed his attention to the improvement of the means of communication in India, has published a very interesting, instructive, and suggestive work, on “Colonization, Defence, and Railways in our Indian Empire,” in which he urges, by forcible arguments, the completion of the Northern Bengal Railway, being an extension of the line from Calcutta already existing to Darjeeling, to Durrut, and thence to the frontier of European population of Bengal. Had this railway been now completed, and, what would have followed as an undoubted consequence, had a depot for English troops been established at Darjeeling, where a healthy climate would have invigorated them for active service, they might have been speedily conveyed to any point where their presence was required. In a notice of the Oriental Inland Steam Navigation Company, three weeks ago, we remarked upon the difficulty of moving bodies and public bodies save under very pressing emergency. In the case of that enterprise, a guarantee was refused, and the project has no life. In the case of the proposed extension of the Northern Bengal and the Simla Railways, admittedly of incalculable importance to the country, having been refused a guarantee, remain merely projected works, whereas their completion is so urgently desirable. We commend Mr. Clarke's work to the perusal of those of our readers who may be interested (and who is not?) in the future of our Indian empire. They will find in it, not only an able advocacy of the particular scheme with which the author is identified, but an interesting description of the hill districts, and a full and extensive practical application of the hill railway system to the colonization and defence of India.

At the Truro County County Court an action for 287. was brought by Mr. Manley, of Chaco water, against Mr. R. Greenwood, of Truro, pursuer of South Ellen mine, for using his patent invention for ventilating the bottom level of that mine. Mr. Stokes, on behalf of Mr. Greenwood, stated he could prove, by mining agents, that this mode of ventilation had been in use for the past ten years, and was now common in many Cornish mines. No specification was in Court to prove Mr. Manley's case, and he was, therefore, nonsuited, and ordered to pay the costs of defendant's witnesses.

Mine Accident.—At Pedn-ar-drea Mine, while Wm. Harris, a miner was at work under an arch, the span gave way, and buried him in the debris, and before some workmen close at hand could assist him, which took ten minutes, life was found to be extinct. At North Hoekar, on Sept. 10, a fall of rock from the ceiling killed a miner, and the body of the unfortunate workman was completely buried, and his body was not recovered until the next morning; it was supposed his death was instantaneous. Michell's legs only were caught, and after remaining until their families got word of the accident in search for them, he was rescued from his burial after he was discovered, and 12 hours after the accident) with only a few bruises.

SOUTH LADY BERTHA.—The lode in the adit varies in size from 2 to 4 ft., with good indications. Judging from appearances, this mine must be shortly brought into a profitable state of working.

The Mining Market: Prices of Metals, Ores, &c.

METAL MARKET, London, September 18, 1857.

COFFEE.		S. S. d.		FOREIGN STEEL.		Per Ton.	
Copper wire	p. lb.	0	1 3/4	Swedish, in kegs	23	0	0
ditto tubes .....	..	0	1 4	" to arrive	21	0	0-21 15 0
Sheets .....	..	0	1 3/4	Dutch, in bags	23	0	0
Bottoms .....	..	0	1 2 1/2	English, Spring	18	0	0-33 0 0
Old (Exchange) .....	..	0	0 0	QUICKSILVER	p. lb.	2	2
Best selected	p. ton	1 1/4	10	nom.			
Tough cake .....	..	12	10	0			
Tile .....	..	12	10	0			
South American .....	..	120					
		Per Ton.					
Gars, Welsh, in London	8	10	0	8	15	0	
Ditto, to arrive	8	5	0	—			
Nail rods	9	0	0	—			
" Stafford, in London	9	5	0	10	0	0	
" ditto	9	10	0	10	0	0	
" Sheeps	11	0	0	11	0	0	
Sheets, single	11	0	0	10	0		
Fig. No. 1, in Wales	4	10	0	5	0		
Refined metal, ditto	5	10	0	5	15	0	
Gars, common, ditto	7	10	0	—			
Ditto, railway, ditto	7	7	6	7	10	0	
Ditto, Swed. in Lon	14	0	0	15	0	0	
" in stock to arrive	15	0	0	16	0	0	
Fig. No. 1, in Clyd	3	9	0	3	0		
Ditto, in Tyne and Tees	3	11	0	3	15	0	
Ditto, forge	3	10	0	—			
Staffordshire Forge Fig.	4	15	0	5	0		
Welsh Forge Fig	3	15	0	4	0		
		LEAD.					
English Fig	23	10	0	24	10	0	
Ditto sheet	24	15	0	25	0	0	
Ditto red lead	26	0	0	26	5	0	
Ditto white	27	0	0	28	10	0	
Ditto patent shot	27	0	0	27	10	0	
Spanish, in bond	23	10	0	23	15	0	
American	none.						
Beam (sheets)	p. lb.	11	1/4	12	1/4		
Wire .....	..	15	1/4	12	1/4		
Tubes .....	..	15	1/4	12	1/4		
		At the works		to be sold		in London	
		to be sold		to be sold		in London	

REMARKS.—The tone of the market for the most part has been steady. The prices of some metals have slightly improved, at the same time a few others have exhibited a declining tendency.

COPPER.—The enquiries for tough cake and ingot have imparted much firmness in current rates; those qualities are very difficult to meet with, especially at fixed prices, and also the demand for manufactured has been, on the whole, satisfactory. The general opinion that prevails is in favour of an upward movement, and dealers generally think it not at all unlikely that before many days a further rise will be established by the smelters.

IRON.—A steady but very quiet business continues to be transacted in most descriptions. Rails, bars, hoops, sheet, and nail rods are in moderate request, and seem just sufficient to enable ironmasters to maintain present quotations. The trade, however, is by no means brisk. Scotch pig-iron has fluctuated in price about 2s. per ton: after receding to 66s. to 67s., the price advanced to 68s. 6d. to 69s., since which a slight giving way was perceptible, and 69s. has been accepted for mixed numbers, cash in 14 days. There are, perhaps, one or two speculators who might yet operate on some terms, but sellers require cash in a less number of days. The market closes here at 68s. 6d. mixed numbers, s. m. b. f. o. b. in Glasgow.

SPELTER.—Advices from Hamburg rather indicate a weaker market, sellers offering this metal freely for delivery here, ex ship, at 30*l*. 15*s*.

TIN.—No change to note in English qualities; foreign, although reduced in value, has to-day rather differed, and a few transactions are reported in Straits at 135 $\frac{1}{2}$ to 136 $\frac{1}{2}$. Nothing now offering under 136 $\frac{1}{2}$.
TIN-PLATES are in less request; prices quoted as before.

LIVERPOOL, SEPT. 17.—There is no alteration in the position of our market for manufactured Iron since the date of our last report. The same steady demand as last mentioned still exists for both Welsh and Staffordshire products, and the general sentiment of the trade is very sanguine.

small quantities, and the general aspect of the trade is encouraging, as current quotations are maintained without difficulty. Some little improvement has taken place in Scotch Pig-iron, consequent upon purchases to a considerable extent having been made for actual consumption, together with some little business on open time for speculation; the price may be said to be 1s. 6d. to 2s. per ton above the quotation of this day week, at which advance the market closes quietly to-day. The shipments for the week are large, being 12,119 tons, against 10,964 tons in the corresponding week of last year. The enquiry for English Tin continues to be good, and current rates are readily obtainable. Tin-plates are to be purchased on terms favourable to the buyer, although the decline in price as yet is but trifling. Copper is in good request, at full prices. Lead is quiet. The following are the quotations:—Iron: Merchant bar, 71. 15s. to 81. 6s. per ton.—Tin: Common block, 140s. per ton; common bar, 1411; refined block, 1441.—Tin-plates: Charcoal, 10, 38s. to 39s. per box; coke, 10, 33s. to 34s.—Lead: English sheet, 25s. per ton; English pig, 24s.—Copper: Cast and tile, 121s. 10s. per ton; best selected, 124s. 10s.; sheathing and bolt, 11s. 13d. per lb.—Yellow metal sheathing, 113d. per lb.—Steel: Blistered, 30s. to 40s. per ton; spring, 20s. to 24s.; cast and shear, 50s. to 60s. per ton.

GLASGOW, SEPT. 17.—There was considerable animation in our market in the beginning of this week, and the price of warrants advanced to 69s. from this, however, there was a speedy reaction to 68s., at which we now remain steady. There is an improved continental demand at present, in consequence of the opening up of the river navigation. Makers' iron, g.m.b., mixed numbers, is obtainable at 67s. 6d. cash, against bill of lading, either for immediate or for forward delivery. No. 1, Gartsherrie, 77s.

MINES.—Throughout the week, although no unusual amount of business has been transacted, a steady demand has existed for shares in several mines, at advanced prices, and we are glad to be able to report upon the healthy appearance of the market generally, notwithstanding the unexpected blow to many English capitalists through the heavy fall in American securities, and the Indian news received late in the week. As we have often said, so long as metals keep up (and there is every reason to believe they will do so), dividend mines will be the favourite means of investment. East Basset shares have been mostly in demand, and the price has risen from 50, 52 to 60, 65; the 60 east, on the south copper lode, has improved, said to be worth 2 tons per fm., and the tin lode still looking well; we first called particular attention to these shares when at less than half the present price—40*l.* per 256*th* (now 512*th*a). Hingston Down shares have been again in request, and the price advanced to 5*½* 6; Sortridge Consols improved to 2, 2*½*; South Frances have been more in demand, at 240; Basset, 220 to 230; South Caradon flatter, at 340 to 346; Par Consola, 20 to 21; Tincroft, 4*½* to 4*¾*; Wheal Margaret better, at 68 to 69; Lady Bertha, *¾*; Wheal Wrey, 6 to 5*½*; West Caradon, 120 to 125; East Russell, 1*½* to 1*¾*; East Alfred remain about 4*½* to 4*¾*; but not quite so firm; Great South Tolgus much more in request, at 17; Pendennis rose to 2*½*, 3, and left off in demand; Ludcott, 1*½* to 2; Wheal Grenville, 1*½* to 2*½*; North Roskeer, 160 to 170; North Crofty have not maintained the high quotations, and leave off at 5 to 5*½*; Llandudno is looking better, and shares are at *¾* to 1, buyers; Stray Park, 6. Wheal Margery 11 to 12; the mine is said to be looking better in American shaft. North Basset keep quiet, at 14 to 15, but rather more enquired for, in West Basset, very little doing, at 26 to 27; Tehidy, 2 to 2*½*. Mary Ann, 47 ex div.; at the meeting, on Tuesday, the accounts showed a profit on the quarter of 276*9*l. 11*s.* 8*d.*, and a dividend of 2304*l.* (2*s.* 6*s.* per share) was declared, leaving a balance to the credit of next account of 2002*l.* 15*s.* 5*d.* the mine looks well; the lode in the bottom level north (the 140) is worth 25*l.* per fm., and south 20*l.* per fm., being the richest level in the mine. Wheal Buller, 290 to 310; Wheal Trelawny, 22 to 23; United Mines are considerably improved, but quotations remain about the same, at 150. Wheal Kitty, 22 to 23, ex div. of 1*l.* per share; South Carn Brea, 6*½* to 7, and have been more looked after, but few sellers; Devon Great Consols, 460 to 470; East Tolgus, 55 to 60; Camborne Vann, 6 to 6*½*. Herodsfoot, 8 to 8*½*, not quite so firm; the mine has just sold 80 tons of less ore, at 17*l.* 9*s.* per ton, realising 10*s.* per ton more than the 80 tons sold in July last, showing that the lead market is better, or the ore of superior quality. Castoll, *¾*; the crusher, we understand, was to go to work this week, and would crush 40 tons of blende per week, sufficient to yield a small profit until the mine is opened out for lead. Great Alfred, 6*½* to 6*¾*; Drake Walls, 24 to 25; St. Day United, 1*½* to 1*¾*, and in moderate demand: Vale of Towyn 3 to 1; West Seaton, 330 to 340, in demand. A

no sellers; North Frances have advanced to 13, 13½; Wheel Reeth, 45 to 37½; Boiling Well, 1½ to 1½. Cradock Moor, 43 to 46; this mine has just paid its first dividend, of 5s. per share. Great Hewas, ½ to 1; Pennedon Consols, 2 to 2½; North Robert, 3½ to 4; Porkellis United, 5½ to 6; West Frances, 17. Wheel Edward shares have steadily advanced during the week, and have reached 10, 10½, being a rise of nearly cent. per cent. in a few weeks; the mine is looking well, and made a profit of 700l. on the quarter; at the next quarterly meeting a dividend is expected. Wheel Arthur, the adjoining mine, has been more enquired after, at 5; shares hitherto at a nominal price. Kelly Bray shares have fluctuated from 1½ to 1½, leaving off firmer, at 1½ to 1½; Holmbush, 2 to 2½; Alfred Consols have been very depressed, and as shares were offered freely the price receded to 1½, 12, sellers, being a fall of 2l. per share during the week.

Mining Exchange Official List of transactions during the week :—

SATURDAY, SEPT. 1.—Alfred Russell, 13½ to 14; East Bassett, 50 to 51; East Russell, 2½ to 3½; Lady Bertha, 17a. 6d. to 18a. 6d.; Norridge Cottage, 1½ to 2½; Wheel Edward, 5½ to 8½.

MONDAY.—Alfred Russell, 4½ to 5; East Bassett, 50 to 53; East Russell, 39s. to 41s.; Hingston Down, 4½ to 5½; Lady Bertha, 17a. 6d. to 18a. 6d.; Fensden, 3 to 4; South Tolsing, 1½ to 2; Tinctor, 4½ to 5½; Wheel Arthur, 4½ to 5½; Wheel Bassett, 217½, 230½.

TUESDAY.—Alfred Russell, 13½ to 13½; Copper Hill, 131 to 132½; East Alfred, 4 to 4½; East Bassett, 50 to 52; East Russell, 2 to 2½; Great South Tolsing, 16½ to 17; Hingston Down, 4½ to 5; Lady Bertha, 16a. 6d. to 17a. 6d.; Vale of Towy, 16s. to 17s.; Wheel Arthur, 4½ to 5½; Wheel Edward, 5½ to 6; Wheel Grenville, 1½ to 2; Wheel Ludcott, 37s. 6d. to 38s. 6d.

WEDNESDAY.—Alfred Russell, 12½ to 13½; Chancellorsville, 4s. 6d. to 5s. 6d.; Hingston Down, 4½ to 5½; Lady Bertha, 18s. to 20s.; Norridge Cottage, 1½ to 2; Tinctor, 4½ to 5½; Wheel Edward, 9½ to 9½; Wheel Margaret, 68 to 70.

THURSDAY.—Alfred Russell, 12½ to 13½; East Alfred, 4½ to 5½; East Bassett, 60 to 65; East Russell, 40s. to 41s.; Heronside, 8 to 8½; Fensden, 30 to 31; Wheel Edward, 2½ to 2½; Norridge Cottage, 2 to 2½; South Francis, 23s to 24s; Wheel Edward, 10½ to 10½; Wheel Grenville, 1½ to 2; Wheel Wrey, 5, 5½, 5½.

FRIDAY.—Alfred Russell, 11½ to 11½; East Alfred, 4 to 4½; East Russell, 34s. 6d. to 36s. 6d.; Great Alfred, 6½ to 7; Hombush, 2 to 2½; Hingston Down, 5½ to 6; Hingston Down, 4½ to 5½; Lady Bertha, 17a. 6d. to 18a. 6d.; Fensden, 3 to 4; South Tolsing, 1½ to 2; Tinctor, 4½ to 5½; Wheel Edward, 10½ to 10½; Wheel Wrey, 5½ to 5½; Wheel Zion, 19s. to 21s.

On the Stock Exchange, the following business has been transacted:—

SATURDAY, SEPT. 12.—Lady Bertha, $\frac{1}{2}$; Sorridge Consols, $\frac{1}{4}$; Wheel Edward, $\frac{1}{2}$ to $\frac{3}{4}$; St. John del Rey, 10 to 10 $\frac{1}{2}$.—Transactions, though not officially marked: North Roakear, 170; East Alfred, $\frac{1}{2}$, $\frac{1}{2}$, $\frac{1}{2}$; Lady Bertha, 14s. 6d.; North Wheel Croft, $\frac{1}{2}$.

MONDAY.—Par Consols, 20 $\frac{1}{2}$; Sorridge Consols, $\frac{1}{4}$; South Carn Brea, $\frac{1}{2}$; Wheel Edward, $\frac{1}{2}$; United Mexican, $\frac{1}{2}$.—Transactions, though not officially marked: North Wheel Croft, $\frac{1}{2}$ to $\frac{3}{4}$; St. Day United, 26s. to 27s.; Wheel Edward, $\frac{1}{2}$ to $\frac{3}{4}$; East Alfred, $\frac{1}{2}$.

TUESDAY.—East Basset, 52; United Mines, 140.—Transactions, though not officially marked: Wheel Edward, $\frac{1}{2}$; Sorridge Consols, 2; Hingett Down, $\frac{1}{2}$; East Alfred, $\frac{1}{2}$ to $\frac{3}{4}$; United Mexican, 140 to 142 $\frac{1}{2}$; Wb. Arthur, $\frac{1}{2}$; Treweth, 16s. $\frac{1}{2}$.

WEDNESDAY.—Wheel Edward, $\frac{1}{2}$; United Mexican, $\frac{1}{2}$.—Transactions, though not officially marked: Sorridge Consols, 2; East Basset, $\frac{1}{2}$; Hingett Down, $\frac{1}{2}$.

THURSDAY.—Alfred Consols, $\frac{1}{2}$; Sorridge Consols, $\frac{1}{2}$ to $\frac{3}{4}$; Wheel Edward, 10; Imperial Brazilian, $\frac{1}{2}$; Dun Mountain, $\frac{1}{2}$; Mariquita, $\frac{1}{2}$.—Transactions, though not officially marked: Wheel Edward, $\frac{1}{2}$; Sorridge Consols, 2 to 10 $\frac{1}{2}$; East Basset, 60.

FRIDAY.—Alfred Consols, 13 $\frac{1}{2}$, 13 $\frac{1}{2}$, 13; Sorridge Consols, 2 to 20 $\frac{1}{2}$; Fortuna, 14.

At Truro Ticketing, on Thursday, 4530 tons of ore were sold, realising 28,067l. 7s. The particulars of the sale were—Average standard, 149l. 4s.; average produce, 6; average price, 6l. 4s.; quantity of fine copper, 271 tons 11 cwts. The sale at Truro, on Thursday, will be 2533 tons.

At Swansea, on Tuesday, 1614 tons of copper ore will be sold, including Cuba, Santiago, Sydney, Adelaide, Berehaven, Spanish, Chili, Namaqua, Bampfylde, Burra Burra, and Namaqualand.

The arrivals at Swansea include—From Caldera, 530 tons copper ore, 935 tons copper regulus, and 7262 bags of silver ores.

At Wheal Buller meeting, on Tuesday, the accounts showed—Balance last audit, 1689*l.* 7*s.* 7*d.*; ore sold (less dues), 558*l.* 3*s.* 11*d.*=727*l.* 11*s.* 6*d.*—Mining costs and merchants' bills, June and July, 343*l.* 11*s.* 10*d.*: leaving balance in favour of adventurers, 385*l.* 19*s.* 8*d.* A dividend of 192*l.* (7*l.* 10*s.* per share) was declared and 191*l.* 19*s.* 8*d.* carried to next account.

At Wheel Mary Ann meeting, on Tuesday (Mr. Thomas Kittow in the chair), the accounts showed—Balance from last audit, 16447. 18s. 4d.; ore sold 73911. 4s. 10d.—95767. 3s. 2d.—Mine cost, merchants' bills, and sundries, April, May and June, 51611. 18s. 2d.; leaving balance in favour of company, 44147. 18s. The balance of 44147. 18s. 2d. was divided into 100 shares, at 441.47s. 18s. 2d. per share) was declared, the balance for new boiler and outfit (167. 14s. 7d.) paid, and 20024. 15s. 5d. carried to the credit of next account. Capt. Peter Clymo, Henry Dodge, and Robert Knapp reported that, although they had an increased balance in the treasury, they thought it better to propose to increase the dividend, and that was the cause of excitement which would have to be made.

At Craddock Moor Mine meeting, on Sept. 11, the accounts showed—Balance last audit, 703*s.* 1*s.* 3*d.*; ores sold, 171*s.* 12*s.* 5*d.*; carriage, 44*s.* 6*s.* 6*d.*; 2446*s.* 9*s.* 2*d.*—Labour cost, 906*s.* 6*s.* 10*d.*; merchants' bills, 594*s.* 1*s.* 3*d.*; lord's dues, 111*s.* 6*s.* 2*d.*; leaving balance in favour of mine, 993*s.* 16*s.* 11*d.* A dividend (the first of 263*s.* 1*s.* 5*s.* per share) was declared, and 730*s.* 1*s.* 11*d.* carried to next account. Capt. Henry Taylor reported that their next sampling would be 188 tons of good quality coarser ore.

At St. Day United Mines meeting, on Monday, the accounts showed—Balance last audit, 1878*l.* 5*s.* 3*d.*; ores sold, 1878*l.* 5*s.* =11,661*l.* 10*s.* 3*d.*—Mine costs and merchants' bills, Jan., Feb., March, and April, 1878*l.* 8*s.*: leaving balance in favour of mine, 2879*l.* 2*s.* 3*d.* A dividend of 1000*l.* (1*s.* per share) was declared, and 1879*l.* 2*s.* 3*d.* carried to next account.

At the Great Wheel Vor United Mining Company meeting, on Wednesday (Mr. Vansittart Neale in the chair), the accounts showed a balance in hand of 1863*l*. 12*s*. 3*d*. A call of 12*s*. 6*d*. per share was made. The committee and auditors were re-elected, and the proceedings, which are fully reported in another column, terminated with a vote of thanks to the Chairman, directors, and manager.

At Gonamena Mts meeting, on Sept. 10, the accounts showed—Balance last audit, \$59.96; 2d.; ore sold (deducting 80¢, 5¢, 6d. lord's dues), 13087.11; 10d. = 12644.11.—Labour cost, 9721.44; 1d.; materials, 2711.15a. 2d.: leaving balance in favour of mine, 201.25a. 3d. Capt. R. Pascoe and Wm. George Jun., reported that on Sept. 10, 1897, they had been driven from the mine by a party of men who were sent to take notice. On ascertaining that the 38 east, on that lode, had been driven by the Weston Caravan adventurers to their boundary, they continued driving, and knowing that there was a good shoot of ore gone down in the level above, they anticipated good results. The work on the 38 east is being worked. They sampled, on Sept. 7, about 125 tons of COPPER ore, of the usual quality.

At Lewiss Mine quarterly meeting, on Sept. 10, the accounts showed—
 Mine cost for May, June, and July, 23,600; 13s. 3d.; mercantile bills, three months—
 19,054, 10s. 7d.; loan's debt, 164, 12s. 6d. 2037.75; interest on loan, 12s. 6d. 2037.75;
 20977.2s. 9d.; leaving balance, owing on the three months' working, 9054.2s. 5d. A
 total of 4s. per share was made, payable forthwith. In consequence of so large a ma-
 jority of the shareholders being resident in Cornwall, it is deemed undesirable to hold
 alternate quarterly meetings in Cornwall and London, in accordance with the resolu-
 tion of the meeting in London, on June 16; it was, therefore, resolved that quarterly
 meetings be held in the account-house on the mine, as heretofore; and that an annual
 general meeting be held in London. The committee of management were re-appointed.
 Capts. W. Bishop and W. W. Marjory reported that during the four months they had
 been in office, notwithstanding all the disadvantages they had been labouring un-
 der from the inefficient management of the mining and producing department, the return had pro-
 gressively increased, and the last month's produce had exceeded any return during
 the same period for some time past.

At Sordridge and Bedford Mining Company special general meeting, on Monday (Mr. Lavinton in the chair), a statement of accounts was exhibited, which showed the total liabilities to be \$202,194.00, and the assets at bank \$6,198.75. The arrears of call were \$501.18, out of which \$500 was considered good. The workings of the mine having been stopped some months, the question was whether they should resume operations and sink 30 fms. deeper, or at once wind-up. A large number of shares are held by parties residing in Tavistock, who are in favour of going on. A resolution was eventually passed, that a meeting be convened for the purpose of

At St. Aubyn and Grylla Mine meeting, on Sept. 7, the accounts for four months ending June 30th—Balance last audit, 185*l*. 2*s*. 1*d*.; mine cost, 229*l*. 6*s*. 6*d*.; merchants' bills, 662*l*. 10*s*. 9*d*.; lord's dues, 3*s*. 5*d*.; extra cost, 2*s*. 6*d*.; repairs, and 10*s*. 10*d*.; total, 1,371*l*. 1*s*. 6*d*. By black tin, 11*s*. 11*d*.; silver, 10*s*. 10*d*.; copper, 37*s*. 4*d*.; tin, 1*s*. 6*d*.; arsenic, 9*s*. 17*d*.; 1*s*. 6*d*. By black tin, against adventures of 639*l*. 2*s*. 4*d*.; which was divided per cent. There have 52 men on work, and 52 on tribute at about 10*s*. 1*d*. 1*f*. The surface operations are going on very satisfactorily, and the machinery is all in good order.

At Wheal Edward Company meeting, on Thursday (Mr. T. C. Munday in the chair), the accounts showed balance in favour of company, 198*l*. 17*s*. 5*d*. A very satisfactory report from Capt. East was read, which appears *in extenso* in another column. It was unanimously agreed to raise Capt. East's salary to 10*l*. 10*s*. per month. The committee of management were reappointed, and the proceedings terminated with votes of thanks to the Chairman, committee, and secretary.

At the West Gairnis and Regent United Mining Company meeting, on Sept. 12 (Mr. W. J. Peiris in the chair), the reports of Capt. Charles Thomas (of Dolcoath) and Capt. J. Webb, the managing agent, were read, expressing the opinion of the prospects of the mines. The following is a brief, but favourable, account of the various objects of importance. The accounts showed that from last audit, 3184, s. 3d.: calls received, 7327, 17s. 5d.; copper ore sold, 1247, 7s. 5d.; sundries, 4, 10s. 3d.—11779, 19s. 4d.—Mine cost, 5577, 5s. 5d.; machinery, 901, 10s. 1d.; officers' salaries on account, 1057, 12s. 1d.; sundries, 211, 8s. 6d.: lay-in balance in favour

of adventurers, 4041s. 11d. The balance of liabilities over assets was 1163s. 10s. 5d. A call of 1s. per share was made payable, 10s. forthwith, and 10s. on Nov. 11 next. The accounts from the commencement of the West Cornwall Mining Co. in 1856, were laid before the meeting, and the Committee recommending their circulation among the shareholders was referred to the committee for their consideration, to make such recommendation respecting them to the next general meeting of the shareholders as they may deem fit. Messrs. Milne and Dennison, the retiring auditors, were made of thanks was passed to them and the Chairman, when the proceedings terminated.

At the Duke of Cornwall Mine meeting, on Tuesday, a call of 2s. per

share was made. Mr. James Henderson reported that there were 17 pitches working on tribute by forty-eight men, and every effort was being made to bring the mine into a paying condition. Various works at surface, &c., being complete, a saving of 1000 per month would be effected.

1855	4705	...	6 1/2	...	30,284	7 0	...	146	10 0	...	182	13 0	...	136	0
1856	4689	...	6 1/2	...	26,199	4 0	...	131	2 0	...	87	17 0	...	107	0

The copper in the ore expresses the net price per ton of copper paid to the miner.

THE PROGRESS OF MINING IN 1856.

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Dated 19th Sept., 1857.

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A notice of Mr. Hopton's invention appeared in the Mining Journal of 20th June.

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Notices to Correspondents.

•• Much inconvenience having arisen, in consequence of several of the Numbers during the past year being out of print, we recommend that the Journal should be regularly filed on receipt: it then forms an accumulating useful work of reference.

REDUCTION OF COPPER ORES.—I had thought that this question, affecting, as it did, only one of the baser metals, would have been previously solved. We have now three patents taken out within the last twelve months—that for Sanding's process, by Messrs. Pinto, Perez, and Co.; Messrs. Neil and Reid's; and Mr. W. C. Dooley's. The results of these have not come to hand. There is abundance of copper ore to experiment upon; consequently there cannot be the same excuse as has hitherto retarded the various alchemical projects for gold making. Any process which can be practically proved to be able to economise so useful a metal as copper will not require much support to bring it into notoriety. There are several who would willingly subscribe for so legitimate an object; but there have been so many assertions within the last few years, without any tangible proofs, and the public have been so deceived, that there is no wonder they now stand aloof. Let any of these inventions do but half what the patentees assert, and they will not only enrich themselves, but confer a great benefit on all classes interested in the copper trade, from the miner to the consumer; the only exception will be the present grinding middle-man—the monopolist of Swansea.—BRASS: Birmingham.

WHEAL MARGARET.—I perceived in your "Notabilia," last Saturday, a statement that "Wheal Margaret was in a very favourable position, and that a dividend of 5s. or more, might be expected next meeting." I fear that this information is not "purely unselfish," and I should recommend intending purchasers to wait the report which, I hear, some gentlemen who hold a large interest in the mine intend shortly to publish for the benefit of the adventurers.—A SHAREHOLDER: Sept. 16.

ANGLO-CALIFORNIAN GOLD MINING COMPANY.—The majority of the shareholders of this association do not seem to be aware of one fact—that is, that the law-suit between Sir Henry Huntley and the directors is to be settled by private arbitration. Both these parties stated in the Mining Journal that they were willing to settle their disputes by an appeal to the shareholders, or in a public court of law. How is it the case is now to be barked? are both parties so interested that the whole of their transactions should not be known? Surely this is a question for the legal liquidators to look into. I cannot but believe that their time would be better employed, and of greater benefit to the shareholders, than it is now, in endeavouring to involve all parties in hopeless litigation.—SCIP: Reading.

UNIVERSITY DEGREES.—In reply to your correspondent's query—whether I would invest a retail druggist or village organist with a literary title?—I should say, certainly, if he were qualified and fairly won it. I deplore all malpractices as much as anyone, but in fairness I instance honourable exceptions, as the word "German" has a very wide sense, and applies beyond Hesse Darmstadt and Bavaria. I am at a loss to understand how the gentleman alluded to consider one degree *infra dig.* when the candidate for LL.D. goes through nearly the same process as the theologian and philosopher. In all probability, the "faculty" of jurisprudence is open to the same names as that of arts and medicine in the quarters specified, and I have known a Ph.D. diploma endorsed with power to admit LL.D. Certain names are "household words," and require no adjunct. We must not overlook that there are many foreigners extant, a glaring case of which has been lately exposed in Scotland.—GERMANICUS: Sept. 15.

UNIVERSITY DEGREES.—If a man has fairly earned his degree, he has a perfect right to attach to his name the initials of any honour that he has won. The great evil at present is, that degrees are often conferred which are undesired; and where there is no oral examination, the system of granting degrees on the strength of a written thesis will always be open to abuse. In Oxford and Cambridge we have heard of "coaches," and many a person has passed there who has not deserved honours, having been crammed for the occasion. Even though individuals have attached to their names Ph.D., LL.D., or D.C.L., unless they have the ability and knowledge to support the degree their pretensions are soon ignored, their qualifications find their natural level, and these pretences become a disadvantage instead of a benefit. An empty quack may impose on an ignorant multitude, but his assumptions are generally ridiculed by sensible people, and his folly exposed. The same may do the lion's skin, but the ears will peep out, and thus the evil will effect its own cure.—DUSKELM.

UNIVERSITY DEGREES.—Had your correspondent "B." been a member of a university, he would have saved himself the trouble of his remarks in your last Journal, whereby he proves that he is utterly unacquainted with the feelings of a university man, and with the precedence which the degrees of the several faculties take. The Glesien Ph.D. is, I admit, frequently improperly conferred, and the same remark might apply in a lesser degree to Erlangen; but the other German universities are not materially less scrupulous in granting their academical distinctions than similar institutions in England—London excepted. The Faculty of Law takes precedence of that of Philosophy, and we may, therefore, presume that Dr. Stenhouse, Hofmann, and others, have abandoned their Ph.D. not because it was *infra dig.*, but because they have attained to a higher university position. The feeling with which they "dropped" the Ph.D. was, no doubt, very similar to that experienced by a graduate who drops the B.A., and "prudently uses in its stead" the M.A. I would answer "B." by stating that if the retail druggist and organist alluded to have obtained the doctorate in any university of repute, and where degrees are not granted irrespective of merit, they are, undoubtedly, as much entitled to the distinction as any other gentleman in the land, since a university degree is, and should be, regarded as a certificate of the literary or scientific attainments of its possessor, rather than as a proof of his wealth or hereditary position in life. By the modifications about to be made in the Statutes of the University of London, all who have acquired sufficient knowledge to qualify them for the honour will be enabled to obtain a degree; but, in the eyes of really educated men, the value of the title will not diminish because it is enjoyed by artisans in common with themselves, as to the littersate degrees conferred by the university will be as untenable as ever. These remarks will probably prevent misapprehension from what you have published, and set the matter at rest for the future.—MASTERS OF ARTS.

VENTILATION OF COAL MINES.—Not having as yet met with any reply to the question (on ventilation of coal mines) put to Mr. Hopton, of Wakefield, in the Newcastle Mining Journal of Sept. 5, although I sent him two copies of that paper, containing the diagram, &c., relative to this question, I beg to say, about a copy be given during this next week, that I will then more fully point out the defects of Mr. Hopton's improved plan in the Mining Journal, and shall endeavour to convince him and the public that the plan of ventilation, as laid down by him, will not bear a practical test.—J. WALES: Hutton Colliery, Sept. 16.

SAFETY LAMPS.—From what has been published in your valuable Journal with reference to the introduction of safety-lamps generally, it appears that the greatest objections raised against them is by the men, who fear that they may lose a trifle of their hard-earned wages; but, if they look at the matter in its proper light, they would find that their introduction would, in most instances, be an absolute benefit to them. The miners, who have been among the first to propose them, have generally offered to provide lamps and keep them in order; and, as under the present system they provide their own candles, they would really earn from 1s. to 1s. 6d. per week more than at present. This fact should induce every collier to urge, rather than obstruct, the use of safety-lamps. As to light, those of the Mueseler class give four times the light of a candle, and cannot, therefore, be objected to on that point.—CARBON: Sept. 17.

SAFETY LAMPS.—A slight error occurs in your notice last week on this subject. At the Government School of Mines, Mr. Warrington Smyth observed that in Belgium 18,000 of Mueseler's lamps had been in use daily for ten years, and only three accidents had occurred during that period from the breakage of glass, thereby proving that the objections so commonly raised against the use of a substance which afforded a greater illuminating power were not founded on any valid ground.—A STUDENT.

IRON IN SCOTLAND.—I read in your last Journal that a large quantity of spathose iron ore had been discovered in Argyleshire, and that some thousands of tons could be had at a low price. Now, if I mistake not, this is the description of ore used to produce the famous German steel; and if it be so, there is a large field for enterprise thrown open. The steel manufacture in Westphalia and the Rhine province gives employment to a vast number of persons, and maintains them in comparatively comfortable circumstances; indeed, poverty in those districts is almost unknown, although labour is cheap. The importance of the discovery of ores which would produce a superior description of metal to the best manufactured is acknowledged, and I trust, therefore, that no time will be lost in testing the value of the Argyleshire discovery, and, if it be as valuable as stated, that steel made from Scotch spathose will speedily be brought into the market.—H. J.: Lincoln, Sept. 13.

CHANCELLORSVILLE GOLD REDUCTION COMPANY.—It is but justice to state that Mr. Harris invited me to visit the Frodham establishment a few weeks ago. During my stay at Rhyl and Chester I had frequent opportunity of seeing the works, but I considered it was preferable to wait a few weeks longer, until they were ready to reduce large quantities, before making an inspection. In the event of the shareholders requiring my service for such an inspection, as they wanted some time ago, it will be necessary to reduce at least 50 tons, and ascertain at once the cost and produce of the same.—EVAN HOPKINS: Ripon, Yorkshire, Sept. 17.

THE "END OF THE MONTH."—Through the medium of the columns of the Mining Journal, we are informed that at the end of the month the Chancellorsville Freehold Gold Mining Company will have the whole of their extensive machinery in full operation. By the same channel, we are told that the Senior de Gravel, as regards the liquidators of the Asturian Mining Company the last instalment, due July 4. That period will be quarter-day, when rents fall due; a little grace is then generally allowed, say some three weeks after, and I shall be only too happy if a favourable solution to both these questions is arrived at by that time. In the meantime, I cannot but think that the directors of the Chancellorsville Company would do well to avail themselves of Mr. Evan Hopkins's services, he being so near at hand as Chester. He would probably be able to account for the delays which have hitherto taken place, and, if required, his report might induce the shareholders to relax in a further extension of time as regards the company. The liquidators of the Asturian Mining Company, I believe, ought to know their duty—to allow no further delay to take place there, but proceed at once to a settlement of affairs, which, if allowed to lay dormant, must only lead to further disappointment, and an immense amount of chicanery and litigation, the issue of which it is not easy to foresee.—AN EXPECTANT ON BOTH.

DRESSING AND BUNDLING OF ORES.—I beg to thank you for the favourable opinion given in your last Journal, in the paper treating of my ore-dressing apparatus; but I could have wished that you had drawn the attention of your readers and ore dressers in a little more detailed manner to my apparatus, as far as it refers to the main part of budding operations—namely, to the most equal mode of feeding any budding concern and the regulating, but means of the company, all I can say is, he is the most liberal captain I ever heard of. He is now fairly in the field, and launched on his own account on the vortex of mining: we shall now see what he can do. He has promised much, he has been liberal in the condemnation of others, and will, consequently, have to battle many oppositions and crosses. These I hope he will surmount and conquer. If he make this a dividend mine, as promised, he may calculate on being able to raise capital to work any mines he may please to bring out. He deserves success, and I hope he will at once obtain a good list of adventurers, to enable him to effect it.—A MINE ADVENTURER.

ROBBER AND CANADA LEAD COMPANY.—Can any of your readers give me information as to the fate of the prospecting party, who, I understand, had been paid up men—when and how was it called? Has Capt. Petherick been at the mine, as reported: if so, will he kindly state his opinions of the property? A letter from Ogdensberg mentions surprise at the statement published in your Journal of April 25—that the directors consist of 11.—R. W.: Chelsea, Sept. 17.

ANGLO-CALIFORNIAN.—No letter or communication has been received by us from Sir H. Huntley, or it would have appeared. Our columns are open to all, which "Inquirer" must be well aware.

DEVON GREAT ELIZABETH.—We have received several letters in reference to the alleged discovery of copper ore at Holne, near Ashburton. We have published enough to show that Capt. W. Williams is considered a very fortunate man in having opened what is believed will prove a valuable mine, but we should like to have an authenticated report, or a verified statement, from Capt. Williams himself, from which our readers could better judge than from the anonymous assertions, it may be, of interested parties.

CWA SEBON MINE, CARDIGANSHIRE.—Travelling from the far West into this locality, and taking up my highland abode, I was greatly surprised to find that this mine, which has become a tin-producing district. To Mr. Paul, of the above mine, belongs the honour of this discovery, which honour is greatly enhanced by the consideration that the existence of tin ores in Wales has never been known by Cornish mine agents of long standing in this neighbourhood, and of many years prior experience as tin miners in Cornwall. As this matter is interesting enough to cause a discussion, perhaps Mr. Paul will be kind enough to state the circumstances and proofs of his discovery.—STANNUM: Goginan, South Wales, Sept. 14.

CWA SEBON MINE.—On perusing your last Journal, I was not a little surprised to find that Mr. Paul had discovered tin in the stuff from this mine. Capt. Boundy, who is a Cornishman, and the resident agent, reports fully on the operations of the mine, but omits to name the discovery of this metal. I have been engaged in developing the mine in Cardiganshire for the last 15 years, and have inspected the mine in question, but in no instance could I trace any of them to contain tin. Mr. Paul being a stranger to the mines of Cardiganshire, allow me to suggest that he take a second glance of the stuff, when I think he will find his so-called tin to be nothing but blende. The sudden discovery of such a valuable metal in this locality has caused much interest.—AN OLD SUBSCRIBER: Goginan Village, Sept. 15.

CAUTION TO THE IRON TRADE.—You have already opened the eyes of the iron trade here to the proceedings of Mansfield Marks, being the same gentleman who represents Mr. Robert Marks, 25, Bloomsbury-place, Brighton. Hearing that he had solicited and received a large sum of money from the iron trade for Cort's Testimonial Fund, wholly without the sanction of the committee or myself, I considered it my duty to write to the directors of the iron trade, and to inform them that the iron trade had been misled. One of the principal iron companies having enquired, after reading the advertisement in your Journal, whether Mansfield Marks had paid the amount they had subscribed to the bankers, they were assured the money had been so deposited; but, on enquiry at Sir John W. Lubbock's, they found that not one farthing had been received. Mansfield Marks was then threatened with prosecution if the money was not returned, when he suddenly left Glasgow, and has not since been seen. I learn also that he confessed to several of the iron companies that he had collected altogether in England and Scotland 6000, but not one farthing has ever reached the fund for which it was subscribed, except a few sums paid ten months ago by the donors themselves to Sir J. W. Lubbock, and by others in crossed cheques, not available by Mansfield Marks; so that the whole of the 6000, with the exception of a small portion, remains most affectionately attached to the linings of the pocket of Mansfield Marks, although he professed here to have engaged in soliciting subscriptions while on private business at Glasgow, from the purest and most disinterested motives, to serve the meritorious descendants of Henry Cort. Your notice of this will have the effect to caution the iron trade and others against the well-paid generosity and sympathy of such a collector as Mansfield Marks.—RICHARD CORT: Glasgow, Sept. 16.

WHEAL EMMA, AND ITS MANAGEMENT.—I do not attempt to defend the management of this mine, which, I must admit, is at least unpractical, and which your valuable correspondent, Mr. N. Knorr, sufficiently exposed in your Journal of Sept. 5; and such an authority cannot fail to have influence with the majority of shareholders; but when I read the letter from "J. R. V. W." in last week's Journal, I was not a little surprised at the strong language he used. It is, I believe, an acknowledged fact that those living in glass houses ought not to throw stones, for fear of an accident. I write without the least prejudice to "J. R. V. W." or any of the Emmas parties, my motive being, if possible, to give all the full benefit of their merits. When speaking of mismanagement, the writer seems entirely to have lost sight of the fact that he himself was a party to some peculiar management (?) at C. Wheal P., not far distant from Emma. Perhaps his response will be that he had nothing to do with the management; but I hold that he was a deputy, or rather an agent, under a very near relative, and we cannot doubt, therefore, but that, whatever he might have suggested for the benefit of the mine would have been to some extent weighed over, and if thought practical adopted. If, at the time so many stamps were erected, he had prudently advised the adoption of only two heads instead of 24, for the quantity of timber they had then discovered of a commercial value, we might have called that discretion and good management, so far; but when we reflect on the facts that have come under our notice—plenty of stamps, erected at a great cost, and so staff to keep them employed—we cannot but feel surprised that parties guilty of such errors should venture to censure others. If he can show us where any superior and practical mode of mining has been accomplished, wherein his voice has been regarded, then we shall be found foremost in awarding him equivalent applause; but, failing to do this, I would most courteously recommend him to leave such remarks as were contained in his letter to other more eminent and practical men.—YOUR FROM A FRIEND: Buckfastleigh, Sept. 16.

SUBSCRIBERS IN AMERICA.—Our friends in America are informed that they can obtain the Mining Journal by ordering it from a bookseller in any of the principal towns in the United States. Mr. Tribner, of Paternoster-row, in the London agency, and sends parcels by every mail to the principal booksellers and news agents there.

•• The MINING JOURNAL can be procured at our office by Eleven o'clock on Saturday morning. Newsmen, therefore, can make the necessary arrangements to have the Journal at the several stations in time to forward by the mid-day trains, enabling many of our subscribers to receive their copies on the day of publication.

THE MINING JOURNAL

Railway and Commercial Gazette.

LONDON, SEPTEMBER 19, 1857.

The standard for copper ore still rises, and is now at a satisfactory price. The demand for the metal is continuous and steady; we may, therefore, hope the smelters will see their true policy in this as in all other businesses is to let live as well as live. If they give miners a fair price for ore, they will hear few complaints from them, who are a passive set of people if fairly dealt with. Great quantities of copper ore will be sent into the market by tributaries who cannot work so as to gain a livelihood at such, we deem, so unfairly low a standard as we had but lately to quote. Such was the case at Fowey Consols, where many pitches were refused by the men that will now be gladly taken. This is by no means a solitary instance, and we quote it because we have it from the agent's report. It is but an index for other mine proprietors to be guided by, not to allow their properties to be trifled with. Now, however, all is well, and we wish no further to refer to the subject.

Tin is also at a remunerative figure, with a probability of its continuing so for a long time to come, stocks being low and the demand increasing, so that tinnars are, and have every reason to be, contented. This must be of vast importance to many young mines, of which we quote, as per agent's report, the St. Austell Consols. This, again, is but a type.

Lead ores are steady, the varieties containing a good percentage of silver in great demand, and obtaining large prices. Spelter is at a high quotation; any fall in this article would be followed by an increased consumption, the high prices limiting purchases by consumers. Iron is in good request, at prices remunerative to the producers. Antimony and nickel, of which our home produce is but small, are, however, enquired for, as are arsenic, barytes, and mundaic, the latter being now consumed in considerable quantities—a relief to many mines, where it was almost deemed a nuisance.

The state of the metal market is all we could wish it; therefore it is not to be wondered at we have an improved demand for shares in productive mines. There evidently appears to be a better feeling towards these securities than has for some time existed. We think, when London shall have returned to town from Brighton and other watering places, where it may now literally be said to be, we may look for a further and a decided rise in good stocks. Capitalists are evidently more disposed to enter on mining; that vague, undefined prejudice against it appears to be subsiding gradually—wearing itself out, like an expiring ember. Money is expected to be more abundant shortly, the pressure is already less severe, the India news is looked on as favourable, although the disaffection still spreads a little, yet the danger is past, the worst is over, and that it will be subdued without severely taxing the resources of the country; when this conviction shall be acted on, we may look forward with good reason to a general improvement in trade, and a still greater rise in mining stock of all descriptions.

The accounts from the districts confirm the reported discoveries and improvements already announced by us. Rumours are prevalent of two or three further extraordinary deposits having been found, but we forbear reporting them fully until further developed. Ere the year expires we anticipate an addition to our Dividend List.

The gradual recovery of prices from the extreme depression in the manner now being realised, in our opinion, augurs much more favourably for being permanent than if they had advanced by one sudden bound; it speaks more caution and determination, though it makes less display and excitement, which would as surely be followed by a reaction. The present movement appears to be anything but the speculation or jobbing that has heretofore entailed such consequences. Our impression is, that far larger amounts have been laid out in mining shares for investment than is generally supposed, it being done quietly, not making that noise and bustle heavy transactions in the "House" display. The largest purchases are made amongst friends, and do not become the subject of general conversation. We know that such stock is daily becoming scarce. We hope to see the nobility and capitalists paying more attention to this our national wealth than they have hitherto done. The Marchioness of LONDONDERRY has set an excellent example. When it is known that such persons as we have been almost compelled to adduce as being interested in mines, when the almost fabulous revenues they have received, and which are being daily augmented in number and amount, shall become better understood—not when heavy stocks are purchased for "rest" and receiving dividends, and not for being sold and re-sold for speculative and advanced rates—then will progressive properties be more enquired after, and eagerly bought up. These form the source for speculation and making money by dealing, as a discovery may at any time double or even quadruple their value in a few days or hours. Their prices now are still very low, and well worthy attention—in some instances not the value of the materials in the mines.

It is only necessary to be careful in the selection of mines to be perfectly safe; to know, first, with whom and in what you adventure; to ascertain the responsibilities you undertake. Too many persons purchase into such matters without giving the subject due consideration, and cry out when too late that they have been duped and injured by mining, whereas they have only themselves to blame, for their indiscretion. If such unwise folly and heedless conduct were pursued in any business the result would be the same. If they will not be guided and take advice, they may in this, as in others, be ruined; but if common precaution be exercised, no profession offers a fairer field for great results, or one so likely not only to be permanent, but at present to advance very materially in public estimation.

The lamentable accidents which have occurred in Lund Hill and other collieries have naturally excited, not only a universal sympathy for the sufferers and their afflicted families, but have again given rise to enquiries as to the possibility of preventing the recurrence of such appalling evils. The communications which have appeared in our columns clearly indicate the great desire there is among all classes to contribute something towards such an important discovery. So earnest has been the anxiety of some of our intelligent correspondents to provide a remedy, that they have even hazarded the publication of inventions which, whilst they displayed great ingenuity, evinced also a perfect absence of that practical knowledge which is essential to the adaptation of a remedy to an evil. Although we have no disposition to ignore the well-meant and laudable assistance of men who have never been employed in, or even visited a colliery, yet in questions involving such serious consequences it surely behoves all who suggest new plans or new instruments to make themselves thoroughly acquainted with all the peculiar circumstances a knowledge of which is essential to the practicability and, what is more, the safety of their scheme. It is often alleged that the inventor of the Davy lamp was no collier, and this is held as a triumphant answer to the croaking of those who find fault with the inventions of amateur engineers. It ought, however, to be remembered that Sir HUMPHRY DAVY spent several weeks in the coal mines of Durham and Northumberland, and in the society of the ablest colliery engineers of the day, before he ventured to promulgate his valuable discovery, and we heartily commend his example to all who are desirous to emulate his fame.

Without entering at present into the subject of ventilation, as to whether it could not be brought so nearly to perfection as to render the use of a safety-lamp unnecessary, we shall content ourselves by assuming as a fact, that in many collieries the fire-damp is so abundant, and the system of ventilation so defective, as to render the use of a safety-lamp absolutely imperative. Taking this as granted, it is evident that too much importance cannot be attached to the discovery of a lamp which possesses perfect security with every other requisite. Although a great step in advance, it has long been felt that Sir H. DAVY'S invention was far from perfection. An increasing want of confidence in it has been gaining ground. Numerous modifications of it, as well as of STEPHENSON'S and CLANNY'S lamps, have been tried; but in none, that we have heard of, has perfect confidence been felt. The simplicity of construction, its comparative cheap-

ness, and small weight, are strong recommendations to the Davy, and notwithstanding the feeble light which it emits it is used far more extensively than any other lamp. There is, however, an objection, and frequently an almost insurmountable one, to its use among the colliers, owing chiefly to the paucity of light it gives, and partly to the difficulty there is in fixing it, especially in thin veins of coal, in the position required. Another objection to the Davy, as well as to most other lamps, is, that the oil cistern is of such a shape as to intercept the rays of light downwards, so that a considerable space of ground immediately under the lamp is left in darkness. The small diameter of the cylinder of wire gauze, although intended as a safeguard, yet has obvious disadvantages, inasmuch as it is so near the wick as to cause the flame frequently to approach very near to it, and on being moved at a velocity of 4 or 5 ft. per second, the flame impinges upon and rapidly heats it. When the coal is very hard, and free from wet or moisture, a quantity of fine coal dust accumulates in and on the gauze, which, on coming into contact with the flame, is ignited, and a slight flash occurs. There can be no doubt but that in a mine where the atmosphere is highly charged with fire-damp, this ignition of the coal dust must be highly dangerous, and may account for the occurrence of explosions which have hitherto been deemed inexplicable.

Highly as we appreciate the Davy lamp, we are by no means blind to its defects, or bigotedly attached to it. In the hands of prudent and intelligent men it may be a safety-lamp, but even of this we are by no means confident; when used by uneducated and careless men we have little or no reliance in its absolute safety. As a scientific discovery, it deserves all the commendation which has been showered down upon it, and as an instrument for testing the atmosphere of a mine in the hands of competent persons it is invaluable. But for every day use by common colliers we require something more than the Davy gives us, without sacrificing the simplicity of its construction and its other valuable properties.

Without too confidently asserting that this important object has been accomplished, we may, at all events, state that at least a great advance towards its realisation has been made. Mr. W. P. STRUVY, C.E., of Swansea, the well-known inventor of the patent mine ventilator, whose experience and eminence as a colliery engineer peculiarly qualify him for the purpose, and entitle him to the confidence of his professional brethren and the public, has invented a lamp, which appears to us as embodying all that is requisite for safety and increased amount of light with other advantages. It may be described as follows:—It possesses all the simplicity of the Davy lamp, and is, in fact, but a modification of it. Its chief difference is that instead of the wire-gauze being a cylinder, as in the Davy, Mr. STRUVY'S is the frustum of a cone, the bottom diameter of which is 3 in. The lamp or oil cistern is placed within the gauze, and occupies so much space as to reduce the cubical contents of the interior to within proper and safe limits. This form of lamp admits the use of a larger wick than the Davy, and when lighted the radiation disseminates the rays over a larger surface, both upwards and downwards, with much less shadow than the Davy lamp. This lamp gives twice the amount of light of the best Davy, and three times as much as the lamps ordinarily used in most collieries. Although of nearly the same internal capacity as a 2-inch cylinder, the gauze of this lamp presents a cooling surface of 51 superficial inches, whilst that of the former is only 40 in. The base of the lamp being large, it stands steadily and safely upon flat as well as on inclined surfaces, and is admirably adapted for working in thin and steep veins. The gauze may be made to screw on to a flat bottom, so that lamps on the Argand, solar, or any other principle, may be adopted, as the air can reach the flame without any special arrangement being made for the purpose.

This lamp has been severely tested in several fiery collieries in South Wales, and given great satisfaction. It combines the following essential requisites—simplicity of construction, a large amount of light, safety, and a comparatively small cost. With such strong recommendations, its success may be confidently predicted, and we trust that all colliery managers will so far avail themselves of this valuable modification of the Davy as at least to give it a fair and thorough trial; and should this inexpensive but important trial be successful, as we anticipate it will be, and lead to the general adoption of Mr. STRUVY'S lamp, we may reasonably expect a great diminution of those appalling explosions so often recently occurring.

In another column will be found some remarks from a correspondent on iron shipbuilding. From the same source we have previously received much valuable information, but on this occasion we are forced to say that our correspondent has mistaken his vocation, and forgotten the old adage of "Ne autor ultra crepidam."

When the *Great Western* was first built, it was reported that with her four masts she could not stem the ocean, although subsequently the *Great Britain* was launched, and performed her voyage with safety. When stranded at Dundrum Bay, she was got off with comparatively little difficulty, thereby proving that iron ships could weather out disasters where wooden ones would fail. One great invention has been the precursor of another. The locomotive invented by GEORGE STEPHENSON, in its first introduction at Killingworth, run its course most modestly, subsequently it achieved the great results which we all know; and so it is with all things sublunary. MORELAND, the painter, a dissipated man, commenced with house painting; he subsequently was known as a great artist: we do not mean to infer that all house painters must be artists, but still if they have the talent, and possessing the first elements of the art, they should progress. A plumber has been able to know the quality of the lead he used, and a glazier the composition of the glass which he putties in a window. The age is one of progression; retrogression is ruin. Our correspondent requires that we should pause; he fears that he sees larger ships looming in the distance, and according to the tenor of his communication, we should believe, did we not know to the contrary, that these fears which he has conjured up, are mere hallucinations, and that while under their influence he "saw double."

If such fears were to agitate the community at large, or had any influence, then all progress must cease. It may be remembered, that some years since it was said that railroads were impracticable; and when GEORGE STEPHENSON was examined before the House of Commons, Mr. WILLIAM BROUGHAM recommended him to state that the speed of the locomotive was about ten miles per hour; if he gave it a greater amount the committee would not believe him, but consider him a madman.

The question of iron shipbuilding is one of great importance; its significance cannot be slighted; we have no fear that its importance will be lost sight of, owing to the ignorance of self-appointed authorities, or visionary enthusiasts. It has become a national subject; the British public have now taken it in hand, and we have no misgivings but that Anglo-Saxon energy and enterprise will triumph over all difficulties, and the *Great Eastern*, now a leviathan, will be the precursor of "mammoth."

THE GREAT WHEAL VOR UNITED MINING COMPANY held their quarterly general meeting on Wednesday, at which Mr. VANSITTART NEALE presided, and the proceedings were of the most amicable nature. Referring to the expenditure, the Chairman and his co-directors met, or rather anticipated, the wishes of the shareholders, and the full and apparently satisfactory explanation given of the cost, whether regarding the management of the materials supplied to the mine, and the promises of a close retrenchment for the future, were received with much satisfaction, and must be highly gratifying to the absent shareholders. The personal attention of several members of the Board in visiting the works, underground as well as surface, is an example that should be followed, as a wholesome check to the existence of abuse. The clear manner in which the Chairman answered enquiry also had its effect upon the meeting. Not the least remarkable fact in the proceedings, however, was that some of the more influential shareholders, representing a large country interest, advocated a larger call than from the explanations of the Chairman was considered requisite. A reference to the accounts will show the punctuality with which the call of 50,000*l.* was responded to, so that the prompt payment of the forthcoming one may be fairly anticipated. We are confirmed in this remark by observing in the transfer list that since the last meeting only three changes have occurred in the proprietary. Had not a temporary diversion (rather in direction than extent) of the great deposits of metal taken place, and the fall in the price of tin, and the occupation of the engines in drainage, which had prevented the expected access to the rich deposits already laid dry in the main Wheal Vor lode, the call would, in all probability, have been rendered unnecessary.

It must have been gratifying to the meeting to observe the steadiness and pertinacity with which the grand object of the undertaking—reaching the great deposits of tin at the bottom of the old mine—had been kept in view, a point which they hope shortly to reach, and ultimately to raise from thence over 100 tons of tin per month. Rich discoveries were announced at the 194, 225, and 164 fathom levels, varying in value from

30*l.* to 60*l.* per fm., and on the day of the meeting a rich deposit of tin was announced to have been discovered in the 236 fathom level, left by the old workers, and worth from 80*l.* to 100*l.* per fm., and reported as affording a long extent of unexcavated tin ground, calculated to yield a large profit to the adventurers. The old mine, as we learn, presented good indications of approximate success, and every fathom drained to bring the proprietary an increase in the quantity of their tin, and so much the nearer to the goal of their wishes. They have much to look for in their close approximation to Trueman's lode, which has proved profitable hitherto, and is expected to much enhance the general value of the property, should it be found of similar richness at the point where it will probably be intersected, before next meeting, by the ample cross-cut which is going out northward from the main lode at so deep a level as the 115. Great expectations are also entertained from the intersection of Vansittart's lode, a side lode of Wheal Metal at the 70 fathom level, also from other galleries of intersection going out a little southward, but parallel to those of the main lode. The next six months, it is hoped, will show a good result from the workings enumerated. It is satisfactory to learn that their value has so far exceeded expectations, and we hope they are but the harbingers of a great success dawning upon this company, and that to an extent which the capital and confidence of such a body of proprietors, seconded by the exertions and skill of the staff, so richly deserve.

We learn from the Californian papers that considerable excitement had prevailed amongst the miners and settlers in Mariposa county, in consequence of an attempt by Col. J. C. FREMONT and his agents to enforce a claim to the mines and mineral veins under a location known as the "Las Mariposas Grant." It appears that Col. FREMONT had a claim, under what circumstances it is immaterial to the real point at issue to enquire, to a grant of ten square leagues of land, the Government, through its Surveyor-General, officially determining the locality to be possessed by him. Strange to say, by a survey made in July, 1856, Col. FREMONT'S claim was located, to use the terms of the reports before us, on lands in the legal possession and occupation of citizens, who, under authority of the State, and the laws regulating mining, had expended money and labour on their respective properties. The *Mariposa Gazette* contains the following exposition of the views of an influential correspondent, the Hon. S. N. INGS, upon the subject, which, being of interest, for the reasons we shall state presently, we embody:—

"It is well understood by all, that the real point in controversy between FREMONT and the people of Mariposa is the mineral wealth contained in the soil. The original position of Alvarado, upon which the grant is based, shows that agricultural and grazing lands, and not minerals, were the subject of the grant; that class of lands was intended to be confirmed to him by the Supreme Court, and the survey made in July, 1856, is a clear violation of that intention, and a fraudulent invasion of the rights of the people, who, notwithstanding that survey, are lawfully in possession of the mines and mineral veins. This survey cannot stand the test of investigation, and I hazard little in saying that it will be held fraudulent and void by the Court. If this be so, the patent which is held up to the world as conclusive evidence of title, is a worthless piece of parchment. But even if the land embraced in the patent were conceded to belong to FREMONT, it by no means follows that he can claim a monopoly of the minerals therein, or can molest others in the enjoyment of what the Supreme Court of our State has repeatedly held to be public property. The precious minerals in the soil of California are the property of the State, and in the exercise of her sovereign power over the same, she has encouraged her citizens to locate upon the mineral lands, and to expend their money in the erection of permanent and valuable improvements, necessary to the development of this great source of State wealth. Under this encouragement, the most valuable veins and minerals were entered upon and improved and developed by a large expenditure of private capital when they were vacant and unoccupied, and before FREMONT'S floating claim of ten square leagues had become attached to any particular land by an official survey. The pretension is monstrous, that he can thus locate his claim upon the possessions and improvements of others, without compensation to the owners, when these possessions and improvements were established under the express sanction of State legislation and the repeated decisions of our highest judicial tribunal. It has been said that the people are trespassing upon FREMONT'S estate; the contrary is true—he is trespassing, or attempting to trespass, upon the mineral locations of the people, who were lawfully in possession before his survey was made, and whose prior rights, under the decision of the Supreme Court of the United States in the FREMONT case, are recognised and held sacred. It has been said that the people have seized upon the private property of FREMONT; the contrary of this, also, is true, for he is seeking, fraudulently, to monopolise the mines, which are the property of the people."

The settlers have invoked the protection of the law against the claims of Col. FREMONT, and in the case of the Merced Mining Company, who have expended upwards of \$800,000 upon their property, the Supreme Court of the State has granted a perpetual injunction, preventing Col. FREMONT from interfering with the operations of the company.

We have information that Col. FREMONT and his agents propose to negotiate a loan in Europe, or to form a company, to introduce water into his estate by means of a lead or canal. The security offered by his "location" is evidently, from the facts we have stated, of a very doubtful character. At a meeting of the inhabitants of the Mariposa county various resolutions, more remarkable for their strength than the elegance of language employed, were unanimously adopted, and avowing a determined resistance to Col. FREMONT'S claims. The meeting resolved that—

"Where bonds are required, in suits for mining claims, all interests held under the mining laws in this county should be deemed available property in the giving of said bonds, and their value fixed by comparison with those in litigation; and no titles under FREMONT'S disputed title to mineral lands should be recognised, unless they also are held in conformity to the mining laws of California. Furthermore, it does not think any of FREMONT'S agents, or those holding titles of lesser under them, should be received as responsible sureties, unless they have other property than that in dispute, or held at under the mining laws."

We deem it our duty thus to give due publicity to the present position of the "Las Mariposas grant," that those of our readers who are interested in Californian speculations may not embark capital without a satisfactory assurance of the value of the security offered.

The telegraph announces the arrival of the Australian July mail. The letters are expected to be delivered this day, via Marseilles. She brings advices from Sydney to the 18th, and from Melbourne to July 22. Violent opposition is represented as being shown to the Crown Lands Bill, which we apprehended would be the case, and will lead, no doubt, to serious disturbances. The tranquility of the colony of Victoria had also been disturbed, by an affray between the Chinese and Europeans at the gold diggings at Buckland; about 1500 of the former are said to have been driven into the bush by 300 of the latter population.

The production of gold is increasing, and the amount exported from Melbourne up to July 18 was just under 6,000,000*l.* Speculation, which was rife at the date of our last advices from the capital of Victoria, had subsided considerably, but Government securities and bank shares maintained their price. The value of wool had fallen 2*d.* per lb., but in the London market it has recently risen to the same extent. Sydney sovereigns had been declared a legal tender in Victoria. From South Australia, we do not learn even the date, but we presume it is to July 17 from Adelaide.

The fact that the July mail from the Australian colonies has arrived is important, for it will be in the recollection of our readers that, on receipt of the June mail, several of our contemporaries, both daily and weekly, expressed their opinion that thenceforth, for some time, there would be great irregularity in the departure of the mails from our Australian colonies, and that none would leave until September; but we contended, in the adverse sense, and pointed out our reasons for so doing, in an article in our Journal of Aug. 29.

The view we took of the question is now proved to have been quite correct, for the Post-office authorities in Sydney and Melbourne have dispatched the July mail. It is true that the *Columbian* did not leave Sydney until July 18, and Melbourne July 22, instead of the 11th and 15th of the month, which are the ordinary days for closing the bags; but why a vessel was detained a week beyond her appointed period does not yet appear, and may have arisen from some local cause. It is clear, however, that it is the intention of the authorities to keep up the monthly mail punctually from September, and our Australian merchants and others need not be under any apprehension on this score. There will be no August mail, as the *Emu* will not reach her destination until the middle of that month; but in September the bags will be duly forwarded, and thenceforth there will be no interruption, as a reserve steamer will be on the station for contingencies. The *Sinla* took the outward July mail for Melbourne, and reached Point de Galle on Aug. 13, which was one day earlier than her contract time. The next mail from Australia will not be due in London until November 2, via Marseilles.

The arrivals from Australia, by a long sea voyage, during the week have been prolific in their cargoes of the precious metal. The *Star of Peace*, the *Sardinian*, the *George Marshall*, the *Sumner Cloud*, and the *Anglo-Saxon* have reached their destination. The value of their collective freights of gold is 340,512*l.*, of which 91,523*l.* has been brought by the first-named vessel, 19,860*l.* by the second, 98,130*l.* by the third, 31,800*l.* by the fourth, and 99,200*l.* by the last. In addition to these receipts, 373,000*l.* has come forward by the mail steamer *Columbian*, and is now on its way from Alexandria to London, so that the whole amount to hand, it

may be said, from Australia is 713,512*l.* We may, moreover, calculate on the prompt delivery of no less than 450,800*l.* more, for two vessels are on their homeward voyage from Melbourne, and have been at sea beyond their ordinary time of making the passage. The *Trus Briton* has been out 97 days; and the *Montmorency*, 94 days; the aggregate of their cargoes of precious metal is as stated, and five merchantmen are now about due from the same ports, with a further collective freight of 1,093,880*l.* The *Norfolk*, one of the vessels in the category, has 343,880*l.* on board; and the *Avon*, *Red Jacket*, *King Philip*, and *Ocean Chief*, have about 750,000*l.* amongst the four. From Sydney, three or four ships are likewise overdue, and the shipments are supposed to be equal to 100,000*l.*; so that with what has come to hand during the week, and what may be relied upon within a very limited period, no less than 1,907,392*l.* will have been delivered from Australian ships, and the produce of the different Australian gold fields. Apart from the Australian shipments of the precious metals, arrived or on their way, we have this week received 246,120*l.* from other parts, so that collectively, the delivery of specie since our last publication has been no less than 860,432*l.* The *Atrato*, from the West Indies, has brought 174,000*l.*; the *Tagus*, from the Peninsula, 3,120*l.*; the *Arabia* and *North Star*, from New York, the former with 11,000*l.*, and the latter with 40,000*l.*; and the *Albion*, from Boulogne, 18,000*l.*

While on the subject of gold imports it will be interesting, and indeed important, to mention that gold mines to the north of Sydney have been reported by the Government Commissioners as not only discovered but proved, on working, to be remunerative. A party of five men, it appears, in one working week, had obtained the precious metal to the value of 1400*l.* The gold, it is stated, is found from 10 to 15 ft. from surface in this district, and appears in large quantities. To the south of the same colony of New South Wales, it is likewise asserted that gold fields of large extent and moderate yield have also been discovered. New Zealand, likewise, seems on the high road to be equally rich in gold production as her neighbouring colonies, as it is reported that large discoveries of this valuable metal have been made at Nelson.

A company is in course of formation in London, for the purpose of establishing direct postal intercourse between Melbourne and Auckland, that the bags from Europe may be distributed promptly throughout the various provinces of New Zealand, and consequently without that delay which is now occasioned by the letters being first sent from Melbourne to Sydney, and thence forwarded to Auckland. When the matter is more matured we will give necessary details, but at present it is merely a plan suggested that New Zealand may participate more freely in the advantage of the overland route *via* Suez. This contemplated arrangement of a direct communication between Melbourne and Auckland is totally irrespective of the proposed route *via* Panama, which is at present in abeyance, inasmuch as the home Government has not yet come to any definite understanding with the existing companies, which are under contract for the route *via* Suez.

WESTERN AUSTRALIA.—Two additional copper mines have been discovered in the Champion Bay district, and they are said to be of extensive yield and rich ore. Increased quantities of pig-lead continue to be raised at the Geraldine Mines, near Port Gregory. The mining districts generally are represented as absorbing the greater part of the limited amount of labour in this province—so much so, indeed, that they are dependent in a great measure on South Australia for grain and flour; and, with a view of inducing the inhabitants to give more attention to agricultural pursuits, the members of the Chamber of Commerce, in their last report, express their opinion that it is expedient to put a protective duty on the importations of Adelaide wheat and flour. They add, "that although duly impressed with the liberal sense of the principle of free-trade, they conceive it advisable to protect the production of their own grain."

THE MINING AND INDUSTRIAL INTERESTS OF CORNWALL.

[FROM OUR CORRESPONDENT IN WEST CORNWALL.]

SEPT. 17.—The copper standard is considerably higher than it was in September last year, and from the larger profits consequently accruing to copper mines, it might be reasonably presumed that there would be more investments in dividend mines, and more purchases in progressive mines of good promise, than there were at this time twelvemonths. But, unfortunately, the long depression of the money market, and the present unsettled state of our Indian affairs, combine to deter capitalists from embarking in mines, and in many other undertakings, until things assume a more favourable aspect. Although, therefore, metals are in good demand, and likely to attain a yet higher price, and the price given for copper ores is a good and remunerative one at the present time, still the business done in mining shares is not equal to what might be expected, and to what has taken place in some former years when there has been a good standard. The standard is now equal to what it was in Sept., 1855, during the Russian war, when cake copper was at 126*l.* per ton; and, consequently, we may expect that the price of cake copper will again soon be advanced to that amount. The standard, also, being so high, is likely to excite a more active business in mines, in the last quarter of the year, than has lately been transacted.

With the exception of West Seton and Wheal Buller, most of the dividend-paying copper mines have lately declined in price, thus affording a good opportunity to capitalists, who may be inclined, after due investigation, to purchase shares. The main lode at West Seton continues very rich, and shares are from 320*l.* to 330*l.* At Wheal Buller account a dividend was declared of 7*l.* 10*s.* per share, and the balance in hand increased; the mine is reported to be looking well. South Frances shares are about 255*l.*, and it is likely they will advance when other levels are extended to the western ore ground. Wheal Bassett shares continue low. East Bassett, 50*l.*, and upwards. Copper Hill has considerably improved, and shares have advanced to 180*l.* and upwards. Alfred Consols are flat. West Damsel, from 90*l.* to 95*l.* North Roscar continues to look well. At Great South Tolgus, there is a good lode in the 80 west. North Crofty shares have advanced. At North Frances, it is expected that the 78 level will open ore. Pendennis is looking favourable in the shaft. East Alfred about 4*l.* Wheal Margaret continues to do well; shares are about 66*l.* Porkellis United about 5*l.* 10*s.* At South Carn Brea, there is a very promising lode in the flat-roof shaft. At Wheal Union, the 20 is looking well. At South Ellen, the western ground is very promising in Bassett's shaft and a winze. At Tywarnhaile, a 70-inch engine is to be erected; there is a high opinion of the mine in the locality. At Great Wheal Busy, a large quantity of tin stuff is being prepared for the smelting-house, and the works are actively prosecuted. South Garra is looking well, and shares are at 30*l.* and upwards. Wheal Jane, 19*l.*

At the meeting of the British Association at Dublin, Mr. Robert Wero Fox, of Falmouth, a name well-known in connection with scientific pursuits in Cornwall, presented a report on the temperature of deep mines in Cornwall. He gave a tabular statement of his observations in Tresavean. The depth of the mine had been increased 540 feet between 1837 and 1853, and the temperature had increased 8° 5' in the deepest levels, or in the ratio of 1° for 68·5 feet.

Lord Stanley, whilst on a visit lately to Mr. Michael Williams, M.P., went to the United Mines, and had the curiosity to go underground by means of the "man-engine." His lordship went down to a deep level on the Hot lode, where the miners work naked, and have cold water from above continually poured over them. His lordship, it is stated, remained there longer than he should have done, and was so exhausted and overcome by the heat and steam, that when he again arrived at the surface, brandy had to be liberally administered to revive him.

The pilchard fishery has been unusually prosperous this year. At St. Ives three companies have taken 4770 hogsheads by seine fishing; and at Mevagisay, Looe, Gorran Haven, and other places, the fishermen have been successful. It is stated, however, that exporters, of late years, have made but small profits; and it has been suggested that additional profit may be made by extracting the pilchard oil, the finer sort of which, it is said, is equal to cod liver oil for medicinal purposes. The suggestion seems to be worthy of the attention of the seine companies.

The Cornwall Railway Company appear at length to be making fair progress towards the completion of the line from Plymouth to Truro. The cause of delay, at present, is the construction of the Great Albert Bridge over the Tamar, at Saltash. But one of the immense tubes has been successfully placed in position, and the other—to complete the remaining half of the span—is in a forward state of construction. The line is carried, for the most part, through a very hilly and difficult country, and must necessarily be very expensive. It will be probably about 53 miles by rail from Truro to Plymouth; and the amount already expended 22

the line up to Midsomer last is 1,082,391. It is stated by the directors that the company will have no difficulty in borrowing 300,000l., which they require to complete their line, on the associated companies—Great Western, Bristol and Exeter, and South Devon—guaranteeing interest thereon at 5 per cent., which those companies have agreed to do. From Truro to Liskeard the line is nearly ready for laying the rails, and from Liskeard to Plymouth, it is in a forward state; so that the chairman of the company, Mr. Michael Williams, M.P., considered himself justified in stating at the recent half-yearly meeting that the line would be opened for traffic before the end of next year. Should this be effected, the industrial interests of Cornwall will receive a very beneficial impulse.

On the West Cornwall line the traffic has slightly increased in the last half-year, except in the case of copper ore, in which there is a considerable falling off. The line does not at present pay dividends, having made a profit of only 3458l. on the last half-year's working. The expenditure has been increased partly in consequence of some accidents, and partly from the fact of Barlow's patent rails, with which the line is laid without wooden sleepers, requiring more rivets and ballasting than were at first placed. The company expect to get a better revenue when the Cornwall Railway is opened; the West Cornwall being now an isolated line.

The agricultural interest of the county is doing well. The month of August was one of the most favourable for harvesting that has ever been known. The temperature was very high, scarcely any rain fell, and the wheat was secured in first-rate condition. In the north-east of the county there are complaints of a deficient yield; but in other parts, as far as yet ascertained, the crop is over an average, and of good quality. The barley is not so good a crop, having considerably failed in Cornwall this year. The out crop is a very good one. The potatoes are much diseased in different parts of the county. The mangold wurtzel looks well; but many of the turnip fields have been desolated by the wire-worm. Apples are more plentiful than last year, and help to make many a miners' party; still they are not an average crop. Wall-fruit is scarce. Good beef fetches a high price; half-fat beasts are lower than they have been. Mutton maintains a high price. Poultry have been plentiful in the West, enabling poor families to lay in stocks for the winter.

THE IRON AND COAL TRADES OF STAFFORDSHIRE.

[FROM OUR CORRESPONDENT IN WOLVERHAMPTON.]

SEPT. 18.—The improvement in the demand for iron, especially for the home market, continues, and the trade is more animated than it has been since the commencement of the present quarter. The only kind of iron for which there is not a good demand is rails, but as that department of the trade has long ceased to be carried on to any large extent in this district, it does not seriously affect the trade here. The excellent demand now experienced is the more remarkable from the fact that the demand from Calcutta has almost ceased. A statement published in the *Midland Counties Herald*, shows that whilst the exports of iron from Liverpool to Calcutta and Madras in August, 1856, amounted to 2042 tons, there were only 536 tons exported thither in August of this year. To Bombay there had been a slight increase, and to China a slight decrease. From America, too, orders continue but slack as yet; and, therefore, to the improved demand, and the orders from the Continent, must be ascribed the recent increase of orders. There is now no doubt that present rates will be maintained at quarter-day, which at one time was somewhat doubted, as very few have strictly adhered to them of late. In the iron foundries and hardware trades an increased degree of animation is spoken of. Pigs are said to be a shade firmer, and ironstone to show signs of a slight advance.

The Coal Trade is active, but prices remain unchanged; the increased supply, at present, keeps pace with the growth of the demand. An event of considerable interest in this district has become known to the public this week. The well-known firm of the Messrs. Bagnall undergoes an important change, owing to the retirement of Mr. Thos. Bagnall and his sons from the business, which is hereafter to be carried on by Messrs. William and James Bagnall. The firm is well-known both in and beyond this district, not merely on account of the great extent of their operations at their various works and collieries, but also for the noble benevolence which they have ever displayed in the promotion of the well-being of the large mass of people to whom they stand in the relation of employers. Scarcely a church of the many which have been erected in South Staffordshire within the last dozen years but has been largely assisted by their contributions, and in connection with their own works they have provided schools and chaplains, the latter of whom visit the colliers in the mines, and hold religious services amongst the workmen. As masters they are highly esteemed, and rare indeed is it for one of their workmen to be summoned before the magistrates on any complaint. It is gratifying to know that this regard for the good of others has been consistent with their own prosperity, and that Mr. Thomas Bagnall and his sons retire from business not only with the esteem of all the people who live around his works, and all his neighbours, but also possessed of an ample fortune, the result of an energetic and straightforward career in business. Were such men now widely scattered amongst our merchant princes, we should not have to bewail so greatly the ignorance and viciousness which abound to so large an extent amongst the great mass of the population.

The inquests on the bodies of the unfortunate men killed by the late explosion have been opened, but, as yet, no evidence sufficient to form the basis of a satisfactory conclusion as to the cause of the explosion has been adduced. The principal enquiry is adjourned to Monday next.

REPORT FROM YORKSHIRE, DERBYSHIRE, AND LANCASHIRE.

[FROM OUR CORRESPONDENT IN CHESTERFIELD.]

SEPT. 17.—The Iron Trade of the past week in these counties has shown a degree of improvement which must be regarded as exceedingly satisfactory, considering the position of affairs in India, and the combined causes which for some time past have kept up the money market. The demand for home consumption is steadily increasing, whilst the requirements for the Continent have continued large, except for India. There is a good enquiry for railway iron, particularly rails, in consequence of several large contracts which have recently been given out.

The Coal Trade is not so active as is usual at this season, but the demand, it is expected, will increase in the course of a fortnight, when the autumn requirements will be more numerous. There is a great increase in production in the South Yorkshire and North Derbyshire districts, and numerous collieries are springing up. A large amount of employment will be afforded by the commencement of the Dunston and Barlow Coal and Iron Company, near Chesterfield, whose works are now being pushed forward with great activity. There is a great want of house accommodation, and those persons who have capital unemployed, or have invested at a small interest, would do well to turn their attention to this locality. The proprietors of the works offer to pay 6½ per cent. for any number of houses which capitalists may build for their workmen, and they will lease them for a period of 20 years. This is a sign of the rapid increase of the mineral development of North Derbyshire. We may expect in the course of a short time that a very large trade will be done in coal; and now in this locality Messrs. Firth are already enlarging their steel iron-works, which are constructed on a German patent principle, which, up to the present time, has acted well. By means of a branch rail the coals are brought from the pit's mouth into the yard of the works.

The Eckington coal, under the estate of Sir Renaby Sitwell, Bart., is being worked by Messrs. Wells. A shaft is being sunk at the extremity of the park, and a branch rail is being formed to connect it with the main line of the Midland.

Mr. Benjamin Biram, of Rotherham, has suggested an improvement in machinery for washing coals and other minerals. The coal or mineral is placed in boxes or receptacles, with bottoms of wire, cloth, or perforated metal, supported on a frame of iron, and with a loose frame of iron bars fitting in the inside, about 3 in. of the bottom.

The town of Rotherham has earned some notoriety for the excellence of its stoves and grates, and we may state, without fear of contradiction, that it is the largest emporium for stoves and grates in this country. Messrs. W. Corbitt and Co., of the Masbro' Works, have manufactured a large quantity for the Government House at Melbourne, after the model of Mons. Moret, a gentleman who was for some time employed in the principal Sheffield houses. The stoves to which we refer are works of high art. They are 4 ft. 6 in. high, burnished steel, over which is dispersed an ornamentation, in ornolu, of the period of Francis I. There

are cornice pieces at the top. The fender is more ornamental still, and a vase is introduced on each side, with good effect.

There is the same activity going on in Derbyshire with regard to lead mining as we have had to notice for some time past. The Ezyam Mine will have a sale soon; but it will not be as large as usual, on account of an accident which happened to the machinery, which delayed the getting of the ore. The mine is working well, and apparently as rich as ever: the shares are firm. Chapel Dale shares are improving in value, and are realising a good premium. The North Derbyshire Company are opening the old Calver Sough, and pursuing some mining operations at the Wren Park, which is looked upon as an improving property. The Stoneyway Company are pushing forward with their engine, and it is expected that in about a month they will be at work.

The Mill Dam Mining Company are in treaty with the proprietors of some adjoining property, and as soon as the necessary documents are prepared they will commence working with vigour.

At Bolton, on Monday, Mr. James Hardcastle was summoned by Mr. Dickinson, the Government Inspector of Coal Mines, for neglecting to provide a proper steam-gauge for the boiler at work at the Roadside Pit, Brightmet. It appeared that the gauge used was a "Salter's spring balance," which the Inspector contended was not a proper steam-gauge within the meaning of the seventh general rule of the Coal Mines Inspection Act. It was necessary that the gauge should represent the pressure of steam at all times, whether there was too little or too much; this indicator did not do so without a mechanical operation on the part of the engineer. The gauge should represent the pressure to the eye without any operation by the person in charge of the engine. Mr. Hardcastle contended that the indicator was a proper gauge, and had been used for some years with perfect success; it was simple and safe, and he did not wish to be driven from its use at the caprice of any one. The mitigated penalty of 12l. with costs, was imposed. Mr. George Barnes, agent for Messrs. Knowles and Stott, was summoned at the same time by Mr. Dickinson for not having provided proper means of signalling at the bottom of the shaft of a mine in Kersley. It appeared that the shaft was being sunk deeper, and that the mine was yet in an unfinished state; that the up signal had been completed, and that the other was attached as soon as the stage was completed. The Inspector had given no notice, and the case was dismissed, Mr. Dickinson having to pay costs.

REPORT FROM MONMOUTHSHIRE AND SOUTH WALES.

[FROM OUR CORRESPONDENT IN SOUTH WALES.]

SEPT. 17.—We announced a few weeks ago that a notice had been posted at the Pontnewynydd, Glynos, and Varteg Works, intimating that the whole of the hands would be discharged after a date affixed. The term of the notice expired on Monday last, but we are happy to say the dispute which caused it has been settled, and the men returned to their work on Tuesday morning. Intimation, it appears, was originally given of the intention of the proprietors to reduce the wages, but this only applied to the puddlers. The latter complained that the iron was not so good as that to which they had been accustomed at Nant-y-glo, but both causes of difference have been satisfactorily removed, with the result mentioned.

A passage in the report of Mr. Herbert Mackworth has called forth a good deal of remark. The incident is related to have taken place after the Coalbrook Vale explosion, and the hero is a fireman named Hopkin Lewis. Mr. Mackworth says:—"The friends of the men in the pit pressed Hopkin Lewis, the fireman, to descend the upcast pit, by which the fire-damp was issuing; he replied, 'If I go down, I shall never come up alive'; but, nevertheless, after shaking hands with the persons about the pit, he descended, with four other men. Two returned shortly afterwards, and two others were with difficulty rescued; but Hopkin Lewis, having gone far in advance, was not extricated for an hour and a half, when he was found to be quite dead." It certainly seems a pity to spoil so interesting an anecdote, but truth compels us to state that the occurrence never took place in the manner described. Hopkin Lewis did, indeed, go down the pit, and lost his life in consequence; but it is stated by those who were by his side before he descended, that he made use of no such words as those imputed to him. Some one fabricated them after his death, and they were spread about in the neighbourhood, but his own fellow-workmen looked upon the story as a *sensu*, and are now somewhat astonished to find Mr. Mackworth giving it the weight of his authority.

The attempt to dispose of the collieries at Bristol by Mr. Watkins, of Cardiff, on Thursday last, turned out a failure. The biddings were nearly all made by parties attached to the concern, and not one of the lots was sold. The first was bought in at 7400l., the second at 3000l., and the fourth at 4000l.; for the third lot no bid was made.

Messrs. Teague and Bennett, of the Hornbeach Coal Company, report the cutting of the Coleford High Delf vein of coal on their property. The mineral is said to be of fine quality, and the seam averages 5 feet in thickness. This is hailed with much satisfaction in the district (Forest of Dean), and will doubtless prove of service to it. In connection with the recent successes we may also mention that of Mr. T. Price, at Machen Colliery, who has struck into a vein of about 5½ feet thick, easily to be reached. Mr. Price has laboured long to achieve this result, and he well deserves his success.

Intelligence has been received of a disturbance having taken place among the colliers working at Cwmaberbron, Ystradgynog, which appears to have originated in a drunken brawl between the Welsh and the Irish. Beyond putting a temporary stop to business, no serious mischief was occasioned.

The advantages of the new landing-place attached to the Neyland terminus of the South Wales Railway, alluded to last week, are already felt. The inconvenience formerly felt by passengers who arrived from Cork and Waterford has now ceased, and every facility is afforded for embarking and disembarking. We understand it is the intention to add an additional pontoon, in order to provide the requisite accommodation for the *Great Eastern*. The work, it is expected, will very shortly be commenced, and carried out.

Trade remains in much the same state as when we last reported. The demand for all descriptions of iron is good, and producers find themselves actively engaged. The Coal Trade is steady, and for steam coal a brisk enquiry continues to exist.

INDUSTRIAL PROGRESS ON THE CONTINENT.

[FROM OUR PARIS CORRESPONDENT.]

SEPT. 17.—The demand for iron has somewhat improved, and the trade generally is becoming more active than it has been. It is asserted that a contract has been passed for 300 tons of pig-iron at 155 fr., but beyond this there has been no material variation in prices. It will be recollected that at the preceding meeting of ironmasters at Besançon, it was unanimously agreed to maintain the price of first quality pigs at 230 fr. for six months, and as the meeting just held took place but three months after the resolution was passed, there was little to be done but confirm the decision which had already been made. The consequence was that there was less animation than usual, very little business done, and no discussion with regard to prices.

Among the ironmasters of Champagne the utmost consternation prevails, in consequence of some works having purchased charcoal at the same price as when pigs were 30 fr. dearer than they are to-day. Prices, however, have not varied much, as you will perceive by the following list:—Forge pigs, 150 to 155 fr.; pigs for the second melting (No. 1), 180 fr.; ditto (No. 2), 170 fr.; charcoal rolls, 330 fr.; rods (No. 21 and above), 390 to 400 fr.; ditto (No. 20), 410 fr.; hammered iron (demi-roche), 370 to 390 fr.; axles (3 to 10 kilos), 450 to 460 fr.; ditto (10 to 15 kilos), 420 to 440 fr.; ditto (15 to 20 kilos), 390 to 400 fr.; ditto (20 to 25 kilos), 420 to 440 fr.; plates (90 to 108 millimetres thick), 420 to 440 fr.; smith-iron (plates and bars), 390 to 400 fr. 300 tons of pigs were recently sold at 155 fr., and a large order, at long dates, accepted for 150 fr. The works are becoming more active, in consequence of the partial cessation of drought; and orders for merchant iron are tolerably abundant. In other metals, English copper stands firm at old prices—Russian, 330 to 350 fr.; Lake Superior, 330 fr.; Chili, 310 to 312 fr. 50 c.; Corroco, 315 fr.; sheets, 360 fr. Tin (Banca), 330 fr.; Straits, 377 fr. 50 c. Spanish lead, 68 fr.; sheets, 78 fr. Spelter, 80 fr.; and sheets, 100 fr.

The total amount of capital subscribed, or engaged to be subscribed, in various enterprises is no less than 212,818,032l.; and, perhaps, half as much again has been spent in foreign schemes. Of this enormous sum 1,144,600l. has been expended in metal mines, 7,048,200l. in coal mines, and 5,872,000l. in other mines, or in what I fancy should be more cor-

rectly denominated quarries. Now, with all due deference, Mr. Commissioner Fonblanque, I do not think mining enterprise has had more than its fair share of this outlay.

The Belgian metal market continues in an excellent position. The *Journal de Charleroi* states that the demand, especially for merchant iron, is good, both for consumption and for exportation; and, of course, while this state of things continues, there will be no disposition on the part of the ironmasters to accept lower rates. In the manufacturing department there is nothing to complain of. The new steel factory at Couillet is now in full operation, and in a position to supply cast-steel of all qualities. Good iron ore is realising a fair remunerative price. The coal trade is brisk, and a large number of orders is being daily executed, and, from all appearances, will have a struggle in future with their powerful rivals—the Charleroi and Louvain and the Northern Railways.

SILICUM.—Several alloys of silicium and other metals were effected by Messrs. Sainte-Claire Deville and Caron, and their properties carefully examined. Alloyed with iron, silicium was found to play the part of carbon, and the results were very fusible pigs or steel bars. At the request of Colonel Treuille de Beaulieu, director of one of the scientific establishments attached to the Commission of Artillery, researches were made to discover an alloy for guns which would be tough, hard, malleable to a degree, and not likely to run under any heat to which it might be liable when in use. The result of these researches was the production of a silicide of copper, or, as the author terms it, of steel-copper. It was remarked in the course of early experiments that in obtaining silicium from chloride of silicium and sodium, in copper vessels, that the latter became covered with a layer of white metal, hard enough to resist a file. It was a silicide of copper, which may now be obtained in considerable quantities, with very great ease. An alloy, which is very hard and brittle, of chloride of bismuth, and containing 12 per cent. of silicium, may be obtained by melting together three parts of fluosilicate of potassa, one part of sodium, and one part of copper, at such a temperature, that the metallic bath may become covered with scoria. The copper takes up a large proportion of silicium, which is set free in this operation, and forms a white substance, more easily fusible than silver. This compound serves as a starting for the manufacture of other alloys. But before noticing them, it may be as well to remark here that in the operation just described the fluosilicate of potassa may be replaced by a mixture of sand and sea salt. The reduction in this case is more difficult. The scoria, to which allusion has been made, is of two kinds; one light, fluid, and transparent, which is thrown aside; the other pasty and dark, which, when remelted with copper, gives a white silicide. High temperature is, however, required to produce the alloy. An alloy containing 4.8 per cent. of silicium, is of fine clear bronze colour, not quite so hard as iron, may be filed, sawn, and turned as easily as the last-named material; while common bronze, which is nothing like so hard, chokes up the tools. The ductility of this alloy is perfect, and melts at the same temperature as common bronze does. When drawn into wires they were found to have the tenacity of iron. As the proportions of silicium are increased, silicides or alloys are obtained of increased hardness, but diminished ductility. In all cases the silicium is distributed evenly throughout the mass, which is perfectly homogeneous, and not liable to run. Two small pieces of cannon were submitted to the *Académie des Sciences*, one containing 4.8 per cent. of silicium, and the other a larger quantity of this metal, and are instances of the facility with which this new alloy may be worked.

The publicity which has been given to the invention for stopping railway trains at present in general use on the Orleans Railway, and attributed to M. E. Guerin, C.E., of Paris, has provoked the publication of a letter by M. Lefevre, who states that in 1844 he patented a self-acting break, after 15 years' devotion to the subject of preventing railway accidents. He improved upon his first idea in 1849, and took another patent for it. Six years were allowed to pass before he could induce the Government to take up the matter. At the end of that time they did so, and the invention was ordered to be tested on the Strasbourg Railway. M. Lefevre states that he neglected in one instance to pay the annual tax of 100 fr. (54s.), and that M. Guerin, profiting by the omission, has succeeded, through the influence of M. Polonceau, Director of the Orleans Railway, in taking a similar patent to his, and getting it adopted on that line. To prove the truth of this assertion, an extract of a letter from the Minister of Public Works, dated Sept. 24, 1856 (at which date M. Lefevre was presented with a pecuniary recompense by way of encouragement), is quoted, in which he says, "Although, Sir, your break has become public property by your neglect of the law, and several railways have adopted it, the Orleans Company in particular, I am most happy to bear my testimony to its excellence, and to its having rendered immense service to the public, by giving greater security to railway travelling." In answer to M. Lefevre, it is asserted by M. Guerin that the two breaks are not identical: this, he adds, M. Lefevre knows to his cost; as, in an action brought before the Correctional Tribunal, he was condemned to pay 500 fr. fine and 500 fr. damages. The Minister of Public Works recommends the adoption of his (M. Guerin's) break on all railways, and the *Société d'Encouragement* awarded him their great gold medal for his invention, which is now employed on most of the French lines. Such tests should be sufficient to ensure M. Guerin's break a fair trial in England.

The first number of a very useful little directory for the consumers of steel has just been issued by M. E. H. Duhamel, of Rue Neuve-Ménilmontant, under the title of the *Annuaire du Consommateur d'Acier*, and it is proposed to continue its publication annually, so that its correctness may always be relied upon. After briefly treating of the manufacture of puddled, natural, cemented, forged, and cast-steel; the means of recognising the quality and description of steel; and such other little matters as are of importance to those employing the metal, by way of introduction, he gives a list of the principal steel manufacturers in France, England, Austria, Bavaria, Belgium, Prussia, Russia, Sardinia, and Sweden, stating what description of steel each country is most noted for, and the particular qualities that the several manufacturers produce. France is extremely well arranged, but the other countries must only be considered as giving an account of those doing a large export trade, with France especially. The trade marks used in each factory are given, and must prove useful to purchasers generally; as, where the respectability of the dealer guarantees the consumer against imposition by forged marks, they are decidedly the most ready means of judging of the article purchased, and the uses to which it is most applicable. M. Duhamel remarks, and certainly not unjustly, that it often happens that for certain uses an inferior priced steel is preferable to the more costly descriptions, and, therefore, it may be presumed that a knowledge of the makers and their manufactures will prevent much useless expenditure. The work is published at a franc, and there is little doubt that there is an ample field for the publication of similar compilations for each of the metals which are dealt in on the market.

IRON SHIP-BUILDING—WILL IT SUCCEED?

[FROM A CORRESPONDENT.]

At first sight it looks like a paradox, though it really is not so, to say that a splendid success creates a great misfortune, by raising a host of imitators and copyists, each endeavouring and promising to excel the other, and persuading others they can do so, ere the original be itself proved. It is, and always has been, the case in every business and profession; by this reason that which was originally really good often becomes embarrassed and thwarted, as well as the numerous offshoots.

Railways, as a grand system, had they been carried out as originally propounded, would have paid investors well; but as soon as success became probable, extensions became the order of the day—extensions were made to every available place; consequently land was purchased at fabulous prices, to appease wrong-headed landlords and quiet opposition; legal charges in opposing, defending, pleading for and against, parliamentary expenses, evidence, and all the other mysteries and necessities know only to lawyers, were extravagantly undertaken, the bare idea of which would now even make a director, as well as shareholders, tremble, and all this from the mania consequent on a great success.

We hope the *Great Eastern* steam-ship will prove an exception to the rule. Had we not the foregoing instances, we might have supposed the very magnitude of the undertaking would have been a sufficient guarantee, which we admit it should be to any calm, reasoning mind; but when a mania for novelty seizes the crowd, these things are not considered as they should be.

In making these remarks, we are not to be supposed to refer to, or wish to discourage attempts being made to develop improvements or discovery; far from it: but when we see it now proposed to construct an iron monster ship at Liverpool, 1000 ft. long!—308 ft. longer than the *Millwall* wonder!—we pause. We shall not discuss the possibility or probability

of its being accomplished; we only mention it as proof of our proposition. We fear it looks like "the beginning of a commencement." It would be as well, at all events, to try how the *Great Eastern* answers. This is a great and costly experiment of itself. We have previously expressed our opinion of the noble ship's capabilities: the more we see of it the more we are confirmed in the correctness of our views. We cannot, however, but express a hope that no precipitate steps will be taken by any of our friends in constructing a fleet of such enormous proportions, until the first specimen shall have proved the possibility of its entire success as a ship, and the probability of a similar result as a mercantile speculation and investment of capital.

That iron shipbuilding is fast becoming one of our national staple manufactures and employment is well known. After many years' wear and tear, which in wooden ships would have required an extensive and expensive overhaul and examination, it has been proved the repairs are merely nominal, the delay trifling. A well-known firm in Liverpool have given most conclusive evidence on this point, when they state the repairs of one of their ships, after 13 years' service, stood them, except for scraping and painting, in the merely nominal sum of 13*l*. The continual oxidation of iron by exposure to the action of the salts in sea water had been a serious objection, woods adhering thereto, notwithstanding the continual corrosion; this, too, has been overcome by the patent substance invented by Messrs. FRASER and BUCHANAN, of Southampton, which, after repeated trials, appears fully to answer the double purpose of rendering scraping comparatively unnecessary, as well as preventing the accumulation of barnacles or algae of all kinds. Practical proofs like these are of more weight than a thousand conjectures, and whole volumes of speculative opinions, from whatever sources.

If a vessel, of either wood or iron, be run on a rock we can easily guess at the consequences; but when the vessel has been stranded or beached, it has been also proved that iron is, at all events, quite as safe as wood, if not superior. We have well considered the subject, and conversed with many skillful sailors and shipbuilders. The preponderance is decidedly in favour of iron for commercial and naval purposes—iron being ill adapted for resisting the effects of heavy shot; we, therefore, anticipate a considerable augmentation of iron ships for general use.

Some complaints have been made of the quality of the plates supplied for shipbuilding. The demand will cause a supply of a better class of goods. These are matters that will plainly and quickly remedy themselves; the demand becoming universal for iron ships of heavy tonnage (we speak not now of leviathans) will naturally have a beneficial effect on the iron trade of the United Kingdom, and, as a consequence, on our coal and iron mines. As this country must be the grand depot for the material, as we cannot be surpassed in price or quality, if need be it sets at rest for ever all doubts as to England remaining still the source and centre of maritime wealth and prosperity, which she has for so many years been, if her people be but true to themselves in fostering and protecting the interests necessary to that end, by keeping in the van of discovery of those sciences appertaining thereto. In these endeavours we hope efforts will not be allowed to overstep the boundaries of discretion, and that novelties may not betray the incautious into such losses as not only to injure themselves, but the very cause they probably think they are thus serving. We fear we see indications of such looting, hence this warning, which we hope will not be taken for, or misunderstood as, a condemnation of great enterprises.

MANUFACTURE OF IRON AND STEEL.

Notwithstanding the immense amount of patronage which the Abbe Faure has received from those in official positions, both in France and in England, it appears that his inventions are only worthy of being classed amongst the theoretical propositions of Bessemer, Marten, and others of a similar inventive genius, and we think few of the practical iron manufacturers of this country will be able to prevent a smile upon reading an account of the methods by which the reverend gentleman proposes to make certain improvements in manufacturing iron and steel.

It has been particularly careful in securing, by letters patent, the whole of his ideas, having taken three patents in this country. The abstracts of the specifications, as given by the *Mechanics Magazine*, are subjoined. The object of one of the inventions is to improve or drive off from puddled iron, sulphur, phosphorus, and other metalloids by cementation; it is applicable to puddled iron in any of its stages or states. He employs a cement composed of the following substances:—14 parts (by weight) of oxide of iron; 30 highly siliceous clay; 30 carbonate of lime or wood ash; 4 finely divided charcoal; 1 carbonate of potash; 1 carbonate of soda. These proportions need not rigorously be adhered to, but varied, and one or more of the substances composing the cement may be dispensed with, according to circumstances and the nature of the iron. He places the iron with the cement in layers into a cementation furnace, and heats the furnace in the ordinary manner. This iron, after cementation, is welded, and then drawn into bars. It thus becomes as soft and as tenacious as iron made with charcoal. The electric currents produced by the mutual reaction of the elements, the reduction of the earthy and alkaline metals, and of a portion of the oxide of aluminium, favour the escape and the absorption of phosphorus, sulphur, and other metalloids. In order that all the carbon may be decomposed and disappear in the state of oxide or carbonic acid, it is necessary that the carbonates and oxides should be in excess. The object of the second invention is to decarbonize cast-iron, by prepared oxide of iron, and to free it from gaseous and solid metalloids. He crushes cast-iron heated to a red heat under rolls, or under a tilt hammer, or broad faced forge hammer. A portion of the cast-iron reduced to a fine powder serves for regulus or metal. To render the oxidation complete, the powdered cast-iron is wetted with pure, acidulated, or alkali water. To obtain cast-steel he has recourse to the processes and apparatus now used for fusing. He places in a melting pot from 33 to 40 parts (by weight) of oxide prepared as stated, to 100 parts of crushed iron, to every 100 parts cast-iron; 8 or 10 parts of the following composition are added, which must be kept as free as may be from exposure to the air; 4 parts (by weight) dry carbonate of soda; 4 dry carbonate of potash; 3 wood ashes; 2 borax; 3 oxide of manganese; 2 highly siliceous clay; 2 parts of oxide of iron. These ingredients should be carefully mixed, and the proportions may be varied according to the product desired. Instead of oxidized cast-iron, iron filings, or scrapings may be used, the same being oxidized by the same process. Instead of 4 parts of dry carbonate of potash, 2 parts caustic potash may be employed. The numerous reactions of these ingredients produced the following effects:—1. The generation of numerous electric currents. 2. Complete reduction of the manganese and oxide of iron (produced by the oxidized cast-iron or iron filings) which unite with the steel. 3. Reduction of the earthy and alkaline metals and borax which absorb the metalloids. 4. Disappearance of the carbon, in an insensible state, as carbon, nitrogen and form cyanides of potassium, sodium, and calcium. 5. Formation of larger crystals in the steel, when it cools down, than have hitherto been produced in steel. The object of the third invention is—1. To purify iron, and to combine it chemically with carbon by cementation. 2. To convert it into cast-steel of superior quality, whatever the nature of the iron first employed. He makes use of a cement composed of the materials and in about the proportions following:—33 parts (by weight) of finely divided charcoal; 33 parts of highly siliceous clay; 33 parts carbonate of lime or wood ash; 1 part carbonate of soda; 1 part carbonate of potash. He stratifies the iron with this cement in an ordinary cementation furnace, and heats it in the manner as is now generally followed, thus obtaining a steel possessing all the qualities of that known as German, or shear steel. The successive heats and firings do not cause it to part with the carbon which is intimately combined with it, as in iron or shear steel. And for this reason, carbon having but a small affinity for iron, requires, in order to enter into intimate combination with it—1st, to be added in an impure state; 2d, to be assisted in its combination by numerous electric currents. Now, these conditions are fulfilled by his process, for—1. The mutual reaction of the carbon and the carbonates causes the greater part of the carbon to assume a molecular state. 2. This change of the carbon and the carbonates, the action of the red hot iron upon the oxide of aluminium, calcium, potassium, and sodium, with the carbon in the molecular state, produce or generate numerous currents of electricity. Further, the earthy and alkaline metals appearing in an insensible state, strongly absorb sulphur, phosphorus, and other metalloids. Thus prepared, this steel may be used as shear steel or German steel, the properties of which it possesses. In order to convert this steel into cast-steel, the ordinary processes of fusing in pots are followed, but with the addition to the metal in the pots of from five to six per cent, by weight, of the following mixture, which, as far as possible, must be kept from contact with the atmosphere:—4 parts (by weight) dry carbonate of soda; 4 parts dry carbonate of potash; 3 parts wood ashes; 2 parts borax; 3 parts oxide of manganese; 4 to 7 parts hydrogenated charcoal soot, lampblack, &c. The four parts of carbonate of potash may have substituted for them two parts of caustic potash. The mixture of these substances should be effected with care, and their number and proportions may be varied to suit the nature of the products to be obtained.

Comment upon each of the inventions would fill a volume, and we will, therefore, content ourselves with noticing that he crushes iron to powder after heating it to redness, in order to prepare oxide of iron—certainly not the cheapest mode—and to render the oxidation complete, wets the powder with pure acidulated or alkali water. The composition which he adds to the iron to effect its conversion into steel is even more worthy of remark, as it consists of dry carbonate of soda, dry carbonate of potash, wood ashes, borax, oxide of manganese, and soot or lampblack, in certain definite proportions, and carefully mixed. No doubt upon theoretical argument the complicated propositions of the Abbe may appear very well, but no practical results could be relied upon from the use of the process, even did not the cost of manufacture which must be incurred—assuming the description to be correct—effectually prevent their introduction.

IRON SHIPS.—Within the last few years an article has been introduced into the iron trade called boat plates, or ship plates, being made especially for building ships, and is considered by the iron masters and shipbuilders good enough for that purpose, though for little else. Twenty years ago my firm launched an iron ship; this iron was then very cheap and cost us nearly 25*l*. per ton; but what was the result? Why, except for scraping and painting, we never laid out in the whole 13 years 1*l*. on her hull. She is built of best boiler plate, and still insures at Lloyd's ship, on an improved mode of construction. We are now building a small experimental ship, on an improved mode of construction. We were offered ship plates for her at 1*l*. per ton, but preferred paying 11*l*. for boiler plates. Lloyd's committee have lately decided that in future iron ships must have the name of the maker of the iron stamped on each plate. So far well; but the surveyor should be a man who, by previous training, knows the makers of good iron from bad.—*COLD BLAST: Liverpool.*

WEEKLY LIST OF NEW PATENTS.

GRANTS OF PROVISIONAL PROTECTION FOR SIX MONTHS.—E. WRIGHT, Rochdale, A. LAW, Littleborough, J. FLETCHER, Little Clegg: Steam-engines. S. CLIFF, Manchester: Purification of certain gases, and the application of their products to the manufacture of alum.—R. LUND, Manchester: Cocks, valves, pumps, and water plugs.—W. HARTLEY, Bury: Steam-engines and steam-boiler apparatus.—H. DICKS, Moorgate-street: Improved fire-escape.—C. and J. THOMSON, Greenbridge Foundry, Lancaster: Discharging condensed water, air, or other fluids, from steam pipes, drying cylinders, and other apparatus where steam is used.—P. BYSSON, Pendleton: Manufacture of sulphuric acid, and in obtaining salts of ammonia thereby.—A. J. FLORES, Orleans: Portable rails or ways to vehicles.—E. GARNER, jun., and A. VALLIN, Paris: Improved electro-magnetic machine.—J. PETRAZ, Rochdale: Regulating the admission of air to furnaces.—J. R. ARTH, Heckmondwike, W. FRASER, W. SPURR, Bristol: Railway signals.

PUMPS FOR MINES.—Mr. Wm. H. Harrison, Ty Mawr, Pontypridd, Glamorganshire, proposes, in the place of wood for the rods of lift and force pumps in mines, to use iron, steel, or a combination of both, in the manner following:—On the top of the first plunger or bucket-rod there is a wrought-iron cross-head, to each end of which is attached a side rod, extending any required distance below the pump-barrel. To the lower ends of the side rods there is a second cross-head, from the centre of which is suspended a second plunger or pump-rod, precisely in the same manner as the piston rod of a high-pressure steam engine. The side rods, with this difference—that the connecting rod, or that part which is attached to the crank pin, forms the bucket or plunger-rod for the next set of pumps, and so on throughout the whole series. The necessary amount of counter-balance weights may be attached to any convenient part of the bucket or plunger-rod.

CRUSHING MACHINE.—Mr. Jas. Taylor, Britannia Works, Birkenhead, registered an invention, which consists in the adaptation and application of a roller having a serrated or roughened surface, and being adjustable so as to admit of being fixed in a suitable position to crush the substances as required between the surface of the roller, and a concave surface serrated or roughened in a similar manner to that of the roller. When required, a second roller and concave surface may be employed, such second roller being adapted to crush or divide the substances more minutely than the former one. The substances to be crushed are fed by means of a hopper to the roller, which is adjusted so as to crush the substances gradually until they are reduced to the required degree of crushing or division as they pass out from between the two serrated or roughened surfaces. The roller is driven by means of a toothed wheel and pinion from the crank-shaft of a high-pressure engine, suitably combined on the same foundation or framework with the crushing machinery, or it may be otherwise driven. A screen or sieve may be combined with the roller or rollers, so that the substances or materials may be screened or sifted on their passage to suitable receptacles. When a second or smaller roller is used, the screen or sieve may be fixed between the two rollers. The second or smaller roller is driven by suitable gearing from the main shaft of the engine, or it may be otherwise driven.

MANUFACTURE OF IRON.—Messrs. T. Brown, and G. Parry, Ebbw Vale, Monmouth, proposed a mode of refining, purifying, or decarbonizing melted cast-iron by means of currents of air, in a covered or closed or partially covered or closed furnace or chamber, without the addition of coal, coke, or other fuel. The metal being in a melted state, preferred from the blast-furnaces being most economical, they run it into a chamber or furnace, which is covered or closed so such an extent as may be necessary to prevent the temperature of the contents being too much lowered. They introduce air tufters from a blowing apparatus into the interior of the furnace or chamber above the level of the melted iron, and in such a position that air shall be blown down with considerable force upon the top of the melted metal, so as to produce a combustion of the carbon combined or mixed with the iron. The blast may be either hot or cold, and they continue the process until the iron has been brought into a state similar to that called *finery metal*, or refined iron.

WINDLASSES, CAPSTANS, &c.—Mr. S. Dyer, Bristol, having obtained from Mr. Camplin, the patent agent, letters patent for improvements in windlasses, capstans, &c., has just specified these improvements, which are stated to consist—First, with reference to windlasses; in lifting the falls by means of a crank and crane, which enables the weight of the anchor, when being let out or let in, to cause the windlass to rotate in an inverse direction. Also, in providing a "rest" in the middle of the body of the windlass, which nearly doubles its strength. Also, in providing two sets of pulleys, which enables the windlass to be divided into two parts at the centre bearing, and to work one body independently of the other (or both together), merely by dropping in a joining block of iron, which is put in or taken out by hand. Also (with regard to both windlasses and capstans), constructing studding boxes or chain wheels in windlasses with a bevelled or generally V-shaped groove, for adapting them to the chain, and to the capstans and windlasses, and capstans, and the adaptation of studding boxes or chain wheels upon the body of the windlass, in combination with fairleads and studding boxes or pulleys for guiding the chains into the lockers, which allows of the use of the "light" of chain alone, thus doing away with all need of rope of cable, all round turns of cable on the body of the windlass, all need of keeping chain on deck, and thus saving the deck from much abuse. Also, the adaptation of friction break and drag-wheels to windlasses with accompanying straps for the purpose of lowering the anchor by allowing the windlass to roll on the line, and for the purpose of leading the chain by its own weight into the chain locker, and for the purpose of pulling the line, and carrying pulleys to aid the windlass in holding at every link, irrespectively of the combination above mentioned—that is to say, when no studding box or chain wheel is employed on the body or barrel of the windlass. Secondly, with reference to capstans; the adoption of gearing applied so that they may be driven by hand or other power; such gearing being so constructed as to be capable of being changed at pleasure from a slow and heavy motion to a quick and light motion, and vice versa. The capstan can also be adapted to work windlasses in an advantageous manner. The inventor also claims the adaptation of his invention to "bumpkins," "gins," and "cranes."

INDEPENDENT RAILWAY BREAKS.—Mr. Joseph Jones, Bolton-le-Moors, has invented a new arrangement of apparatus for preventing accidents or loss of life on railways. He proposes to place at intervals of, say, 100 yards, and at curves, on the line, a set of globe or other form, with springs. This instrument consists of an iron or other metal projection, rising above the line, and carrying springs, and layers of gutta serena, cotton, wood, &c., to receive the shock of the break attached to the engine to be stopped. The break consists of an arm, extending beyond the front of the engine, formed of gutta serena, &c., with one spring at the end nearest the engine, and another at the end which comes in contact with the fixture. He states that as there is a spring to each side of the rail, and two front breaks, each of which has two springs, there will be eight springs to bring the engine to rest, or sixteen springs between two engines, in the event of a collision. The power of resistance of the springs is such that the average accumulated force of the engine, &c., at ordinary speed. A second invention, which he proposes to adopt for the same purpose, consists in the employment of a break only. This break is attached to the front of the engine, and is of such form, that when lowered the wheel of the engine is received in a semicircular spring, which extends beneath the wheel, and forms a skid. The break is lengthened by providing a block of rectangular form, or nearly so, beyond the spring. When the break becomes insinuated beneath the wheel, the weight of the engine, as well as the friction, prevents the engine from proceeding far. In consequence it is further softened by the yielding movement of the break, which is fitted to slide upon the rails, and is fixed to the engine vertically, horizontally, or perpendicularly.

WATER CURVED STREAM.—Lieut. J. Kingsley, Bedford-square, proposes (as will be seen by our advertising columns) to supersede entirely the use of the steam engine for the purpose of raising water. Where a mine is situated within ten miles of a river the invention is capable of application, and could be applied for pumping the water or drawing minerals, as might be required. The simplicity of the machine is extreme, merely consisting of three cocks and one valve, and, from the description, possesses all the elements calculated to ensure its speedy and general introduction; and further, it has been regarded as extraordinary that so simple and effective a contrivance should have passed over without it had been proved impracticable. A diagram of the apparatus, which forms the subject of the patent, is in course of preparation, and when we have examined it we shall be enabled to pronounce a definite opinion on the merits of the invention.

AIR-ENGINES AGAIN.—Since the air-engines of the steam-ship *Erebus* have been changed to steam-engines, and the furnaces, regenerators, compressing pumps, &c., of the "caloric" apparatus removed to make way for the more practically applicable boilers, condensors, air-pumps, and other paraphernalia connected with the non-common-place steam engine, the air engine, as it is called, has been left in a state of comparative idleness. Profiting, or endeavouring to profit, by the experience obtained in each succeeding effort, he has continued to build and modify his favorite style of engine, having completed, we think, seven distinct machines, mostly double cylinder engines of comparatively small size, since his last trial on the ship. He has now floating in the Hudson a small steamer, or air-er, about 70 ft. long, which he has succeeded in driving at a good rate by the combustion of an almost incredibly small quantity of pine kindling wood. There are two engines, horizontal, single-acting, and apparently about 30 in. diameter by 36 in. stroke. The vessel is an open boat, or mammoth yawl, and the paddle-wheels are about 10 or 12 feet in diameter. We believe air alone is the fluid employed as a medium to generate the power, but cannot say whether the regenerator or other of the features principally relied on in the former efforts are still employed. We shall endeavour to keep our readers posted, if anything of importance is developed.—*Scientific American.*

RIFLE TELEGRAPHING.—In these days of "big war," I think I may do some public service, by stating that I can enclose a roll of paper, containing information in writing, in the wooden shaft of either my rifle whistle-signal, or percussion explosive bolt; both of which can be thrown to the distance of one thousand yards from a rifle of one-inch bore, using a gun-cotton cartridge; as I have frequently proved in the open fields near the Tisbury Station, in presence of the railway officials. These messengers could be thrown across a broad and rapid river where no boat could live; as they fit with their projections (placed in front and at the base) into the spiral grooves of the rifle, there is little friction, the central part of the shaft having none whatever. A drawing of the whistle-bolt will appear in the *Practical Mechanic's Journal* for next month, October. Specimens of these rifle-bolts are to be seen at the South Kensington Museum of Inventions.—J. NORTON, Rosherville, Sept. 12.

MANUFACTURE OF CHARCOAL AND COKE.—Mr. Ebenezer Rogers read a very interesting paper on this subject before the Institution of Mechanical Engineers, in which the history of charcoal burning, and the making of coke is well given. The most important part, however, of the paper is his description of his application of the Westphalian charcoal kiln to the making of coke. He has succeeded so far, that instead of coking 6 tons of coal in an oven that cost 80*l*., he is enabled to coke 150 tons at once in a kiln costing less than the former single oven. From the discussion which took place after the reading of the paper, it appears that a great source of expense in the oven was the heavy cost of repairs, in consequence of their complicated construction of fire-brick and ironwork, but the new kiln being built in the simplest manner of rough rubblework, with only a plain lining of fire-brick, and without any ironwork, reduced the expense of repairs to a very small sum. In the kiln natural means were employed to effect what had been accomplished in the closed oven by artificial plans; in the latter a waste of coke arose from the air cutting across the surface, and burning away a considerable portion during the process of coking, the prevention of which depended on the air-tight construction of the oven, but in the new kiln this loss was prevented by inverting the action; a considerable portion of the gaseous carbon was retained and deposited again in a solid form upon the heated coke upon the bottom of the kiln, instead of passing off as gas, also the whole of the incombustible coke was enveloped in an atmosphere of carburized hydrogen, carbonic oxide, and nitrogen gases, which would not support combustion, and was thus protected from being wasted by burning. Only blast-furnace coke has been made at present in the new kiln, but Mr. Rogers had that no doubt good locomotive coke might be made in them by retarding the process, so as to produce a more slowly burnt

coke, and consequently of harder quality. The coke now made at Abercrombie was superior in quality to that made previously—a different seam of better coal being now worked. The ordinary cost of coking ranging from about 10*l*. per ton in the hemispherical ovens, exclusive of repairs, to 18*l*. per ton, inclusive of repairs, in the improved and more expensive rectangular ovens. In the new kiln the cost of working does not exceed 6*l*. per ton, as the men only filled the coal direct into the kiln after laying the bottom fuel, and in some places the coal is actually tipped into the kiln from the colliery wagons working at the higher level, and the coke wagons were afterwards run into the kiln, to be loaded direct from the heap of coke when burnt, thus reducing the labour of working to a minimum. It is anticipated that the new plan will save fully half the cost of coking, and will prove a valuable source of economy in the cost of locomotive fuel, if the process can be satisfactorily applied.

HEATING POWER OF COAL.—In a paper read by Mr. Waller, of Lincoln, before the Institution of Mechanical Engineers, a series of experiments, with a view to ascertaining the heating power of coal, were referred to as having been made by the aid of a simple and effective instrument, invented by Mr. Jonathan Wilkinson, of Grimsthorpe, near Sheffield. The results obtained from the several descriptions of fuel experimented upon are subjoined; the figures showing the number of lbs. of water evaporated by 1 lb. of fuel:—

Charcoal for foundry blacking	12.20
Charcoal, oak	12.25
Charcoal prepared for electric light, very pure	12.50
Anthracite coal	13.00
Anthracite coal, average of two samples	13.10
Hard Yorkshire coal—Woodhouse	13.75
Wallend coal—Yorkshire	14.85
South Yorkshire coal—average of seven samples	15.00
Welsh coal—Yorkshire	15.12
Silkestone coal—Yorkshire	15.20
Gas coal near Chesterfield—first sample	15.50
Gas coal near Chesterfield—second sample	16.00

From these results it appears that the evaporating power of coal does not depend so much upon its containing a large proportion of carbon, as in the case of charcoal and Welsh coal, as upon the gaseous quality of the coal. In one case, with the quality of Yorkshire coal, a 30 grain experiment made with this apparatus fully confirmed by a 5 ton experiment with a steam-boiler; but in another instance the results did not agree, as a different sort of coal requires a different description of furnace, the coals composed almost entirely of carbon requiring less air for combustion than the gaseous coals, and consequently requiring a smaller furnace and smaller flues. The result obtained from coke, which is composed almost entirely of carbon, is low with the apparatus; whereas with a strong draught and proper furnace it would be high.

THE ENDLESS RAILWAY.—One of Boydell's traction engines, which has been purchased by Government for use in the Royal Arsenal, made the journey from Rye, in Norfolk, to Woolwich, on Thursday, drawing a load of timber on four trucks, the foremost of which contained 11 tons 10 cwt.; the 2d., 10 tons 10 cwt.; the 3d., 9 tons 10 cwt.; the 4th, 7 tons 10 cwt., together with a van laden with coals, water, &c. the whole load, including the engine, which weighs about 15 tons, being 57 tons. The "pattern," or endless railway, enabled the engine to travel over the uneven and long line of country roads, some of which were scarcely passable on account of the late heavy rains, at the average rate of about four miles an hour, and on entering Woolwich the speed was far greater. On arriving at the dockyard gate the control of the engine was remarkable, being with its complete load conveyed with much facility into the interior of the dockyard, where the timber is stored for shipbuilding. This is the second engine which has been purchased by Government, and is on a much larger scale than the former one. It is fitted with a couple of 7-in. cylinders, and is said to do the work which would require a team of 60 or 70 horses in the hands of a private contractor. The engine is the property of the East India Company's service, joined the train at Epping, and accompanied it about eight miles on the road to Woolwich, in order to verify its efficiency on behalf of the Indian Government, who have entered into an engagement for the purchase of a large number of the endless railways, for the conveyance of troops, as well as to work in the cotton and sugar plantations in the West.

HONDURAS INTER-OCEANIC RAILWAY.—Advices from the engineer corps July 20, report rapid progress with the location of the road. The Atlantic division had completed the certification of the line, 43 miles, to Portillo, and had advanced to join Mr. Trautwine between Yojos and Ojosa Agua. Mr. Gliddon, deputy agent, had reached the capital. Lieut. Col. Stanton, R.E., lately member of the commission for settling the European boundary of Turkey, and Sergeant Finch, R.F., also gone to Honduras to review the work now in progress, and report to the Government on the route generally. These officers sailed on the 17th from Southampton. The following extracts from a letter of Mr. W. Whitehead, one of the assistant engineers on the Honduras Inter-Oceanic Railroad, dated San Pedro Sula July 14:—"I shall soon move with my party fifteen miles from here, to Pasa, and from there we shall take another long stride, perhaps to Yojos. Some one about Ojosa has started a project to have a monthly or semi-monthly steamer to run there, via Belize, to Havana. In that case we will have a regular mail route on both sides, and can send letters with certainty either way. As to our survey, as far as we have gone, we have got a beautiful first-class cheap road, with easy grades and very slight curves. We are 40 miles from Puerto Caballo, and have risen 125 feet only. Col. Kinney, in a private letter to a gentleman of New York, says:—"I shall have to-day for Belize, and return to San Juan, via my possessions on the Mosquito shore, with a view of coming back to establish myself here, to lend a helping hand to the great railroad, which I regard as the leading enterprise of the age. When in New York, and until recently, I had my doubts as to the practicability of joining the oceans through Honduras, but since I have come on the ground I am satisfied that the work is not only feasible, but, in my view, the route between the seas."

THE FIRST LOCOMOTIVE.—The late Duke of Portland had a locomotive of the Killingworth make placed on the Kilmarnock and Troon Railway in the year 1817 or 1818, for the purpose of conveying coals from his Grace's collieries to Troon Harbour. This engine worked for a considerable time, but was discontinued, chiefly in consequence of the cast-iron tram-rails having been found too weak for its weight—malicious or wrought-iron rails not having then come into use for public railways.

RAILWAY TRAFFIC.—The Traffic Returns of the Railways in the United Kingdom for the week ending Sept. 12, amounted to 3,718,857, and for the corresponding week of 1856 to 5,000,185, showing an increase of 67,907. The gross receipts of the eight railways having their terminus in the metropolis, amounted for the week ending as above to 211,325*l*., and for the corresponding week of last year to 211,138*l*., showing an increase of 190*l*. The increase on the Eastern Counties amounted to 21,801*l*., on the Great Northern to 2,981*l*., on the Great Western to 361*l*., on the London and North-Western to 17,611*l*., total, 42,754*l*. But from this must be deducted 171*l*., the decrease on the London and Blackwall; 15,271*l*. on the London, Brighton, and South Coast; 18,711*l*. on the London and South-Western; and 516*l*. on the South-Eastern—together, 40,857*l*., leaving the increase as above 190*l*.

The receipts on the other lines in the United Kingdom amounted to 295,440*l*., and for the corresponding period of 1856 to 283,050*l*., showing an increase of 67,904*l*. In the receipts of those lines, which, added to the increase on the metropolitan lines, makes the total increase 698*l*., as compared with the corresponding week of 1856.

METROPOLITAN SCHOOL OF SCIENCE, APPLIED TO MINING AND THE ARTS.

THE PROSPECTUS for the ENSUING SESSION, 1857-58 (containing information as to Lectures, Laboratories, Fees, &c.), is READY, and WILL BE SENT, on application to TRENNHAM BAKER, Esq., Museum of Practical Geology, Jernyn-street, London. RODERICK I. MURCHISON, Director.

MINERALOGY.—KING'S COLLEGE, LONDON.

Prof. TENNANT, F.R.S., will COMMENCE a COURSE OF LECTURES on MINERALOGY, with a view to facilitate the study of Geology, and of the Application of Mineral substances in the Arts. The lectures will be illustrated by an extensive collection of upwards of 3000 specimens, and will begin on Wednesday morning, 7th October, at Nine o'clock. They will be continued on each succeeding Wednesday and Friday at the same hour. Fee, 42 2s. R. W. JELF, D.D., Principal.

THE DIRECTORS OF THE ISLE OF MAN MINING COMPANY (LIMITED) are open to receive TENDERS for the DELIVERY

of 200 tons BEST SOUTH WALES STEAM COALS, on the South Side, Douglas Harbour, opposite their Stores, monthly, from the 1st of November next, for twelve months, under a penalty for non-fulfilment of contract, to be specified at the signing of the contract. The tenders to be addressed to Mr. Wm. Beckwith, Douglas, Isle of Man, on or before the 1st day of October 1857.

Forwards Mines, Isle of Man, Sept. 16, 1857.

GREAT CRINIS COPPER MINING COMPANY.—Notice is hereby given, that, by order of the Committee of Management, a CALL of ONE SHILLING per share, on the NEW SHARES of this company, is now made, payable at the office, 27, Austinfriars, on Wednesday, the 23d inst. London, Sept. 2, 1857. By order, WILLIAM CHARLES, Secy.

TO IRONFOUNDERS AND MACHINE MAKERS.—WANTED,

For Copiapo, Chili. 1. An AMALGAMATING MACHINE, for gold and silver ores, very complete. 2. SEVERAL IRON HYDRAULIC WHEELS, suitable for a large smelting works. 3. MILLS, with VERTICAL MILLSTONES, for crushing ores both with and without water. 4. GOOD IRON STEAM BOILERS. Address, or apply before Eleven a.m., to Mr. B. LENOIR, Pantou Hotel, Oxenden-street, Haymarket.

TO WORKING COPPER SMELTERS.—WANTED, for Copiapo,

Chili, an INTELLIGENT and WELL-EDUCATED MAN, MANAGE and SUPERINTEND the REVERBERATORY FURNACES, the FOUNDRIES, and the CALCINING of COPPER ORE. Long practical experience is desirable.—Address, or apply before Eleven a.m., to Mr. B. LENOIR, Pantou Hotel, Oxenden-street, Haymarket.

STEAM PUMPS, FOR LAND AND MARINE PURPOSES,

SINGLE or DOUBLE ACTING; sizes from 2½ to 12 in. diameter, and from 4 to 18 in. stroke; by JOHN CAMERON. Used for feeding boilers, raising water (for reservoirs, tanks, irrigation, &c.), turning power, or as a steam fire engine. Works, Egerton-street, Hulme, Manchester.

DURRODE COPPER MINING COMPANY.—NOTICE.

THE SOUTH-WEST OF IRELAND MINING COMPANY (LIMITED), constituted under the Joint-Stock Companies Act, 1856, having PURCHASED the DURRODE MINE, ALL PARTIES HOLDING DURRODE SHARE CERTIFICATES may EXCHANGE THEM for SHARES in the SOUTH-WEST OF IRELAND MINING COMPANY (LIMITED), each Durrode Share Certificate of five shares representing 1*l* 5s., and entitling the holder to a share of 5*l* 10s., fully paid-up, in the South-West of Ireland Mining Company (Limited), on payment of the other 5*l*. 5s. Claim must be made on or before the 24th inst., after which date it will be barred, and the shares otherwise allotted. By order, J. CASH, Parrot, Durrode Company's Office, 26, Throgmorton-street, Sept. 15, 1857.

TREDINNICK'S LIST OF PRICES OF BRITISH MINES,

RAILWAYS, BANKS, &c., published weekly, and forwarded by post at a charge of 5*l*. annually. Fluctuations in market value faithfully recorded, with Comments on the progress of Dividend and sound Progressive Mines. Gresham House, Old Broad-street, London.

WHEATLEY KIRK'S IMPROVED PORTABLE UNITED ENGINE AND BOILER.—To parties requiring engine power, and who wish to be able to take it with them when their lease or tenancy expires, contractors, manufacturers, miners, farmers, &c., WHEATLEY KIRK recommends his NEW and IMPROVED PORTABLE UNITED ENGINE AND BOILER, which can be removed with the greatest facility, and set a particle of brickwork required. These engines and boilers are being made from 2 to 20-horse power. Drawings, tracings, and specifications sent to any part of the United Kingdom or Continent.

Also, IN STOCK, a variety of Engineers' Tools, Lathes, Drilling Machines, Slotting, Planing, Punching, and Shearing ditto, Screwing ditto, Nut Cutting ditto, Stocks, Taps, Dies, Horizontal and Vertical Engines, from 2 to 100-horse power.

WHEATLEY KIRK, Engineer, &c., Central Office, Cross-street, Manchester; Works and Stores, the Wellington Works, Bonded Wharf, Chapel-street, Salford.—N.B. Auctioneer and Valuer of every description of Mill Work, Plant, and Machinery.

SOUTH-EASTERN RAILWAY.—CONTRACT FOR THE SUPPLY OF STORES. from the 30th September, 1857, to 31st March, 1858.

The Directors are prepared to receive TENDERS for the SUPPLY of the under-mentioned STORES, viz.:

- | | |
|--|--|
| No. of Contract. | No. of Contract. |
| 1. Oil, tallow, turps, &c. | 8. Varnish, paint, driers, &c. |
| 2. Iron, axles, tyres, forgings, &c. | 9. Rope, canvas, bags, cotton waste, felt, &c. |
| 3. General ironmongery, tools, &c. | 10. Coach trimmings, carpeting, cloth, horse hair, towellings, &c. |
| 4. Files, steel, springs, &c. | 11. Leather, hose pipes, straps, &c. |
| 5. Sheet brass, brass and copper tubes, finished brass work, &c. | 12. Brushes, brooms, mats, &c. |
| 6. Tin, tin work, lead, zinc, and other metals. | 13. Timber, deals, wood work, &c. |
| 7. Glass, lamps, lamp materials, &c. | 14. Sundries. |

Specifications and forms of tender may be had on application in writing to the Storekeeper, London Bridge Terminus.

Forms of tender for each contract are printed separately, and parties applying should state the particular contract for which they propose to tender.

Patterns may be inspected on and after the 18th inst., at the Store's Office, Bricklayers' Arms Station; and any further information required may be obtained at the Storekeeper's Office, London Bridge Terminus.

Tenders to be returned on or before the 24th inst., endorsed "Tender for Stores," addressed to the Secretary, London Bridge Terminus. S. SMILES, Secy.

London Bridge Terminus, Sept. 12, 1857.

CALEDONIAN RAILWAY.—At the TWENTY-FIFTH HALF-YEARLY GENERAL MEETING of the Caledonian Railway Company, held in the Merchants' Hall, Glasgow, on Tuesday, the 15th day of September, 1857.

WM. JOHNSTON, Esq., Chairman of the Board of Directors, in the chair.

The advertisement calling the meeting having been read, the common seal of the company was attached to the registers of proprietors in presence of the meeting.

The following resolutions were passed:—

1. That the report of the directors, together with the balance-sheet and statement of accounts laid before the meeting, be received and adopted; and that dividends be now declared for the half-year ending 31st July, 1857—on the preference stock of the company, at the rate of £4 10s. per cent. per annum; on the 4 per cent. preference half shares, at the rate of £4 per cent. per annum; on the 5 per cent. preference half shares, at the rate of £5 per cent. per annum; on the preference quarter shares, No. 2, at the rate of £5 per cent. per annum; on the ordinary consolidated stock of the company, at the rate of £3 10s. per cent. per annum, less income-tax in each case, and all payable on the 29th day of September current.
2. That Thomas Salkeld, Esq., who retires from office by rotation at this meeting, be re-elected one of the directors of the company.
3. That Thomas McKicking, Esq., who retires from office by rotation at this meeting, be re-elected one of the directors of the company.
4. That Thomas Price, Esq., who retires from office by rotation at this meeting, be re-elected one of the directors of the company.
5. That John Fleming, Esq., accountant, Glasgow, be elected one of the auditors of the company, in the room of George Redman, Esq., who has retired.
6. That the balance of £1203 13s. 9d. of the revenue account of the 7-mahagow Branch Railway to 31st July, 1857, be applied towards payment of the 5 per cent. due to the holders of the class A shares, from the dates the calls on these shares respectively fell due.
7. That the directors be authorised to enter into such arrangements with the promoters of the Carlisle and Hawick Railway as may appear most conducive to the interests of the Caledonian Railway Company, and to concur in making such applications to Parliament as may be necessary thereupon.

WM. JOHNSTON, Chairman.
ARCH. GIBSON, Secy.

CALEDONIAN RAILWAY.—At an EXTRAORDINARY GENERAL MEETING of the Caledonian Railway Company, held in the Merchants' Hall, Glasgow, on Tuesday, the 15th day of September, 1857.

WM. JOHNSTON, Esq., Chairman of the Board of Directors, in the chair.

The advertisement calling the meeting having been read, the following resolutions were passed:—

1. That, under the powers of the following Acts relating to the Leith and Glasgow Branches—viz., the Caledonian Railway (Motherwell Branch Extension) Act, 1847; the Caledonian Railway (Leith Branch Extension) Act, 1847; the Caledonian Railway (Leith Branch Extension) Act, 1847; the sum of £150,000 which the company are authorised to raise as a separate stock, denominated the Leith and Glasgow Branches stock, be raised by the creation of 3000 shares of the nominal value of £50 each, denominated Leith and Glasgow Branches shares; that the creation of 200 of said shares, representing £10,000 of said stock already subscribed for and created, including 1000 shares class A, which are entitled to a preferential dividend out of the profits of said branches, in terms of the said Caledonian Railway (Leith Branch Extension) Act, 1847, be and is hereby confirmed. That the remaining 1100 shares of £50 each (including therein 200 class A shares), representing £55,000 of the said Leith and Glasgow Branches stock, be and are now hereby created; and that the directors be authorised to allot and issue the whole of the said 3000 Leith and Glasgow Branches shares, so far as not already allotted and issued, to the persons who have become bound, or may hereafter become bound, to advance the amount thereof, and to make calls on said shares to such extent as they may find necessary, all in terms of said Act.
2. That as soon as one-half of the said share capital of £150,000, authorised by the said Caledonian Railway (Leith Branch Extension) Act, 1847, shall have been paid up, the directors be, and are hereby, authorised to borrow upon mortgage, under the powers of the Caledonian Railway (Leith Branch Extension) Act, 1847, on the security of the undertaking authorised by that Act; and, if paid up, again to borrow any sum or sums of money not exceeding in all the sum of £20,000.

WM. JOHNSTON, Chairman.
ARCH. GIBSON, Secy.

CALEDONIAN RAILWAY.—At an EXTRAORDINARY GENERAL MEETING of the Caledonian Railway Company, held in the Merchants' Hall, Glasgow, on Tuesday, the 15th day of September, 1857.

WM. JOHNSTON, Esq., Chairman of the Board of Directors, in the chair.

The advertisement calling the meeting having been read, the following resolutions were passed:—

1. That the sum of £20,000, which the company are authorised to raise under the powers of the Caledonian Railway (Grant Branches) Act, 1857, be raised in terms of said Act, by the creation of 1200 shares of the nominal value of £50 each, to be denominated Caledonian Railway (Grant Branches) stock, which will be a separate stock, denominated Caledonian Railway (Grant Branches) stock, and shall not form part of the general capital of the company; and that the said 1200 shares be, and now are, created accordingly; and that the directors be empowered to allot and issue the said shares as follows—viz., 600 shares to His Grace Walter Francis, Duke of Buccleugh and Queensbury, and the remaining 600 shares to the persons who have become bound by the subscription contract, or may hereafter become bound, to advance the amount represented by the said shares for the construction of the work authorised by said Act.
2. That, as soon as the said sum of £20,000 shall have been subscribed, and one-half thereof paid up, the directors be, and are hereby, authorised to borrow, on mortgage or bond; and if paid up again, to borrow, under the powers of the said Caledonian Railway (Grant Branches) Act, 1857, any sum or sums of money, not exceeding in all £20,000.

WM. JOHNSTON, Chairman.
ARCH. GIBSON, Secy.

LINEAR LEAD MINING COMPANY.—Notice is hereby given, that, in conformity with the Deed of Settlement, the HALF-YEARLY GENERAL MEETING of the shareholders in this company will be HELD at this office on Tuesday, the 29th inst., at Two o'clock P.M., to receive the accounts, balance-sheet, and reports of directors and auditors, for the half-year ending 30th June last, and for the general purposes, as authorised by the Deed of Settlement.

The Board of Directors, as authorised by the Deed of Settlement, AND EIGHT PENCE per share be declared on the paid-up shares of the company, payable on the 17th day of October next; and that the Transfer-books be closed for such dividend on the 30th inst., and re-opened on the 19th day of October.

By order of the Board, J. B. COLOGAN, Secy.

5, Queen-street-place, Upper Thames-street, London, Sept. 14, 1857.

THE GREAT BARRIER LAND, HARBOUR, AND MINING COMPANY (LIMITED).—In 10,000 shares, of £5 each.

Deposits, 10s. per share at the time of application, and 20s. per share upon allotment.

Prospectuses can be obtained at the office, No. 117, Bishopsgate-street Within, London.

INVESTMENT.—Messrs. FULLER and CO., 51, THREAD-NEEDLE STREET, LONDON, continue to TRANSACT BUSINESS in BANKING, MINING, RAILWAY, and OTHER SECURITIES, many of which will safely pay from 15 to 25 per cent. Those of a progressive character frequently rising above 100 per cent.

WANTED.—Alfred Consols, Botallack, Dolcoath, Hingston Down, North Roskear, South Crofton, Wheal Margery, Edward, Ledwith, Tebday.

Since calling public attention to twelve progressive mines, a rise has taken place of the following:—Cradock Moor, from £35 to £45; equine to £10,500; Calstock Consols, £35 to £45; £3048; East Russell, from 10s. to £2; £20000; Wm. Edward, £4 to £5, being an increase in value of £16,000; Swanpool, £1 to £2½; or £2700; Total increase of value in three months of £37,200.

The following shares present equally as good prospects of success, and worth immediate attention:—

Devon Burra Burra.	Tokenbury Consols.	Great Wheal Busy.
Bolling Well.	Dale (Limited).	Drake Walls.
North Wheal Wrey.	South Bog (Limited).	West Wheal Edward.
Barf.	East Providence.	Whitcomb Down Cons.

Every information given, either personally or by letter, and the names of the mines, sample of which may be seen at this office.

UNITED STATES OF AMERICA.—DUPEE, PERKINS, and SABLES, BOSTON, MASSACHUSETTS, BROKERS for the PURCHASE and SALE of STATE, CITY, and RAILROAD SECURITIES, MANUFACTURING and BANK SHARES, give particular attention to the MINING COMPANIES OF LAKE SUPERIOR, and furnish reliable information concerning them.

[DUPPE, PERKINS, and SABLES refer to the Editor of the Mining Journal.]

IN CHANCERY.—In the Matter of the JOINT-STOCK COMPANIES ACTS, 1845 and 1846, and the NANTLE VALE SLATE COMPANY.

MR. WILLIAM DEW WILL SELL, BY AUCTION, at the Sportsman Hotel, Carnarvon, on Wednesday, the 30th day of September, 1857, at One o'clock in the afternoon, in One Lot, by direction of the Master of the Rolls, the Judge to whose Court this Matter is attached, the TY-MAWR SLATE AND SLAB QUARRIES, situate in the parish of Llanfyllin, near Carnarvon, held under a lease for 21 years, from the 1st of October, 1852, determinable, at the option of the lessee, at the end of the first seven or fourteen years, subject to a royalty of 2s. 6d. per ton, with a proviso, that the same shall not be less than £100 per acre. Also, the USE of a TRAMWAY in and over certain fields, known as Cae Llyn Telyn and Cae Carrol, in the said parish of Llanfyllin, for a term of 21 years, from the 13th of May, 1854; and also, the RIGHT to USE the SHORES or BANKS of the NANTLE VALE LAKE, for the deposit of refuse of the quarries, subject to the yearly rent of £30; together with the PLANT and MACHINERY in and upon the said quarries.

Particulars, with conditions of sale, may be obtained at the place of sale; of Messrs. HARRISON, solicitors, 5, Walbrook, London; at the British Hotel, Bangor; the Commercial Inn, Portmadoc; Pengwern Arms, Pwllheli; and the Sportsman Hotel, Carnarvon.

GREAT CONSOLIDATED MINES, GWENAP.

MR. LITTLE WILL SELL, BY AUCTION, on the above mines, on Tuesday, the 29th inst., at Eleven o'clock precisely, the following valuable MINE MATERIALS:—viz., One 80 in. cylinder PUMPING ENGINE, 10 ft. stroke cylinder, and 9 ft. in shaft, with four boilers about 45 tons; one 20 in. cylinder steam engine and cage, with boiler about 6 tons.

- | | |
|---|---|
| 2 10-in. capstans. | 100 pairs 6 in. fagoted iron strap-plates. |
| 2 60 ft. shears. | 5 pairs 5 in. ditto ditto |
| 1 cat-head. | 10 pairs 7 in. fagoted iron caps. |
| 1 surface balance-bob. | 10 pairs 6 in. fagoted iron caps. |
| 3 underground balance-bobs. | 350 fms. 12, 13, and 14 in. wood rods. |
| 1 12 in. capstan-rope. | 7 tons best and rod pins. |
| 1 10 in. capstan-rope. | 6 tons staples and glands. |
| 1 9 in. capstan-rope. | 3 tons straps and pins for balance-bob. |
| 1 cat-head rope. | 2 tons bolts and bars. |
| 10 9 ft. 17 in. pumps. | 2 tons railroad iron. |
| 20 9 ft. 18 in. pumps. | 2 tons tram saddles. |
| 60 9 ft. 13 in. pumps. | 3 tons whim-chains. |
| 10 9 ft. 14 in. pumps. | 3 tons old brass. |
| 70 9 ft. 13 in. pumps. | 10 tram wagons. |
| 13, 14, 15, 16, and 17 in. pump rings. | 65 ft. 8 in. sheaves. |
| 2 3 in. 15 in. matching pieces. | 2 40 in. smiths' bellows. |
| 3 6 ft. 15 in. matching pieces. | 4 36 in. smiths' bellows. |
| 2 6 ft. 14 in. matching pieces. | 5 smiths' anvils. |
| 3 15 in. top doorpieces. | 5 10 ft. 12 in. brass plunger-poles and |
| 3 15 in. H-pieces. | stocking. |
| 1 12 in. H-piece. | Bucket prongs. |
| 1 14 in. windbore. | Several pairs of 12, 13, and 14 in. fagoted iron yokes. |
| 10 14 in. stuffing-boxes and glands. | Smiths' tools. |
| 10 13 in. stuffing-boxes and glands. | Wrought and cast-iron. |
| 10 12 in. stuffing-boxes and glands. | Old boilers and boiler tubes. |
| 13 pairs 7 in. fagoted iron strap-plates. | A large quantity of new iron. |

The agents on the mine will show the materials; and for further particulars, apply to Mr. PAVON, or at the offices of the auctioneer, Redruth.

Dated Sept. 16, 1857.

IMPORTANT AND EXTENSIVE SALE OF HORSES, &c., AT THE STABLES, BLOXWICH BRIDGE, NEAR WALSALE.

TO RAILWAY CONTRACTORS, HORSE DEALERS, COAL AND IRONMASTERS, AND OTHERS.

MR. H. FARRINGTON respectfully announces that he has received instructions from Mr. Pigott (who has finished his contract on the Cannock and Norton branches of the South Staffordshire Railway) to OFFER, BY PUBLIC AUCTION, at the railway stables, Bloxwich-bridge, within one mile of Walsale, on Tuesday, October 6th, 1857, FIFTY SUPERIOR YOUNG AND WELL-SEASONED POWERFUL DRAUGHT HORSES, with their gear; capital GREY HARNESS MARE, five years old, 15½ hands, very steady in harness; capital COB RIDING HORSE, 14 hands.

Sale to commence at Eleven on Tuesday evening, under the usual conditions.

The auctioneer begs to call the attention of dealers and others to this important and genuine sale, as the horses are mostly young, and in excellent working condition, and will be sold by the proprietor without reserve, he having no further use for them.

Also will be OFFERED, at a FUTURE SALE, about 300 tons of WROUGHT-IRON RAILS (40 lbs. to the yard), 300 EARTH WAGONS, CARTS, BARROWS, PLANKS, STABLES, SHEDS, &c., due notice of which sale will be given in a future advertisement.

The stables are situate near the Mill, one mile from Walsale, on the Bloxwich-road; and suitable accommodation will be provided for any gentleman driving or riding to the sale.—Auctioneer's offices, Bridge-street, Walsale.

BRIERLEY, STAFFORDSHIRE.—VALUABLE MINING PROPERTY.

MR. THOMAS NOCK WILL LET, UPON LEASE (with the sanction and authority of the Charity Commissioners for England and Wales), BY AUCTION, at the Swan Hotel, in Wolverhampton, on Wednesday, the 14th of October, 1857, between the hours of Four and Six o'clock in the afternoon, subject to conditions to be then produced, ALL that FARM and LANDS situate in the township of Brierley, in the parish of Sedgley, in the county of Stafford, with the DWELLING HOUSES and BUILDINGS thereon erected, and now in the occupation of Mr. James Evans, containing, by a recent survey and admeasurement, 17 A. 2 a. 30 p., or thereabouts, for the term of 21 years, at the yearly rent of £51 as a surface rent, payable half-yearly during the said term; and also ALL the UNGOTTEN MINES of COAL, IRONSTONE, LIMESTONE, CLAY, and all other MINES and MINERALS lying and being in and under the said premises, with full power to get and dispose of the same, for the said term of 21 years.

The minerals under the estate immediately adjoining to the above property are now being extensively worked by Mr. H. E. Whitehouse and others, and are of first-rate quality.—Further information may be obtained from Messrs. PORTS and GOSNOLD, solicitors, Bridgnorth and Broseley.

SOUTH STAFFORDSHIRE.

TO IRONMASTERS, COAL MASTERS, CAPITALISTS, AND OTHERS.

VERY VALUABLE THICK COAL AND IRONSTONE MINES.

BRETTELL LANE, KINGSWINFORD.

MESSRS. OATES and PERRENS have been honoured with instructions from Messrs. Wheeler to OFFER FOR SALE, BY AUCTION, on Monday, the 16th day of November, 1857, at Five o'clock in the afternoon, at the Talbot Hotel, Birmingham, the above mines, which have been previously made by private contract, of which due notice will be given, in the following, or other lots as shall be determined by the vendor, and subject to conditions then to be produced, the entirety of that exceedingly valuable and most desirable MINERAL ESTATE, called or known as the HAWBUSH ESTATE, situate at Brettell-lane, in the parish of Kingswinford, in the county of Stafford, and containing similar valuable MINES of THICK or TEN YARD COAL, BROOCH COAL, IRONSTONE, &c., to those found in the adjoining collieries, headings from which have been driven under the estate to the extent of about 400 yards, as shown on the annexed plan; these fully prove the existence thereunder of the extremely valuable mineral strata of the surrounding highly prolific district, and may be made available for the future working of the mines. There is an excellent MINE of SURFACE CLAY on the property, and a capital MANAGER'S HOUSE and house adjoining, FARM-HOUSE and OUT-BUILDINGS, together with TWO COTTAGES and GARDENS, and a considerable portion of the estate may, with advantage, be offered for building purposes; the whole contains by measurement 34 A. 1 a. 33 p.

Particulars and plans of which are herewith given, and may be had at the offices of the Midland Counties Herald, Aris' Gazette and Journal office, Birmingham; the Chronicle office, Wolverhampton; and the Mining Journal office, London; at the place of sale; and the principal inn in the neighbourhood; at Messrs. WHEATLEY KIRK, 51, Threadneedle-street, London; or of the solicitor or auctioneer, Messrs. WHEATLEY KIRK, who will appoint a person to show the estate, upon application to the offices aforesaid; and for further information, apply to Mr. HARWARD, solicitor, or the auctioneers, both of Stourbridge.

PARTICULARS.

No. on plan.	Description.	Cultivation.	Quantity.
1.	Barrow's close, and two houses and gardens.	Pasture	2 a. 2 a. 3 a.
2.	Yew-tree piece	Arable	3 2 9
3.	Cookhouse	Arable	1 3 20
4.	Hanging piece	Arable	2 2 21
5.	Tree piece	Arable	5 3 14
6.	Rough in ditto	Wood	0 3 11
7.	Withey bed	Oziers	0 3 3
8.	Pool and rough in ditto	Arable	1 3 28
9.	Pool and rough in ditto	Wood	0 3 31
10.	Upper sling and road	Oziers	1 0 7
11.	Lower house piece	Pasture	2 3 0
12.	Square piece	Arable	3 1 27
13.	Rough in ditto	Witheys	0 0 18
14.	Upper house piece	Pasture	2 1 36
15.	Sling	Pasture	1 1 8
16.	Barn, stables, cowhouses, pigsties, granary, steam-engine, rick yard, and fold yard.		0 2 15
17.	Road and well		0 0 9
18.	Two houses and gardens		0 1 35
19.	Hawbush house and garden		0 0 34
20.	Gardens		0 0 24
	Half the adjoining turnpike road		0 3 7
	Total		34 A. 1 a. 33 p.

The surface is proposed to be offered with the mines, upon such terms as may be agreed upon at the time of sale; the buildings are in substantial repair, and there are residences for a manager and clerk. The auctioneers beg particularly to call the attention of capitalists, &c., to this most desirable property, which is situate near Brettell-lane turnpike gate, and adjoins the Stourbridge and Dudley turnpike-road, to which it has an excellent frontage; is within 1½ mile of Stourbridge, ¾ from Dudley, one mile from the important neighbourhood of Walsley and the glass manufacturing districts, close on the verge of the iron district, where at this time coal is becoming extremely scarce, and seven miles only from Kidderminster, to which district it will offer the advantage of the nearest land sale, the demand extending from 800 to 1000 tons weekly upon an average. It is within one-third of a mile from the Brettell-lane Station of the Oxford, Worcester, and Wolverhampton Railway, and a less distance from the Stourbridge Canal; in short, it affords to an enterprising speculator a ready and certain means of realising an ample fortune in a very limited period.

SOUTH WALES.—Mr. ARTHUR O. DAVIES, of Dowlais, is authorised to TREAT for the SALE of TWO VERY VALUABLE GOING COLLIERIES in South Wales.

Also, to LET, an EXTENSIVE TRACT of STEAM COAL, on a long lease, at a moderate royalty, with a railway running through the property.

For terms, apply as above.

MINING MACHINERY AND MATERIALS FOR SALE.

MR. C. E. PEARSE WILL SELL, BY AUCTION, on Monday, the 28th September inst., at the WITHIEL UNITED MINES, in the parish of Withiel, the following very excellent MINING MACHINERY and MATERIALS:—viz., One WATER-WHEEL, 20 ft. in diameter, 3 ft. breast, with wrought-iron cast-iron piece and cast-iron sockets; one ditto, 16 ft. in diameter, 3 ft. 6 in. breast, with wing gudgeons, crank, brasses, and bearing blocks, complete.

8 9 ft. 10 in. pumps.	4 9 ft. 8 in. pumps.
1 9 ft. 10 in. windbore.	1 9 ft. 3 in. windbore.
1 9 ft. 9 in. working.	1 10 ft. 7 in. working.
1 6 ft. 10 in. doorpieces.	1 6 ft. 10 in. doorpieces.
4 9 ft. 8 in. pumps.	1 6 ft. 5 in. doorpiece.
1 9 ft. 8 in. windbore.	200 fms. 1½ in. flat rods.
1 10 ft. 7 in. working.	200 fms. 1½ in. flat rods.
1 6 ft. 8 in. doorpieces.	200 fms. 1½ in. flat rods.
4 9 ft. 7 in. pumps.	200 fms. 1½ in. flat rods, with pulley.
1 9 ft. 7 in. windbore.	80 fms. ladders.
1 10 ft. 6½ in. working.	30 fms. iron main rods.
1 6 ft. 7 in. doorpieces.	30 fms. bucket rods.
1 4½ ft. 7 in. matching.	20 fms. air-pipes.
	20 fms. ladders.

One capstan and shears, with oak axle, and cast-iron centre piece; 90 fms. ½ capstan-chain; 30 fms. 9 in. capstan-rope, quite new; 3 horses-whims, with poppet heads and sheaves; 3 whim-rope; 80 fms. 7½ in. whim-chain; 40 fms. ½ in. ditto; 2 shaft bobs, with brasses and bearing blocks, complete; 2 balance bobs, a large quantity of new and old timber, new and old iron, about 6 tons of tramroad iron and saddles, large tram wagons, 3 small ditto, miners' tools of all kinds, miners' and other clothes, smiths' tools, screw gear, bolts and nuts, 40 in. smiths' bellows, vice, mandril, grinding-stone, double and treble blocks, horse-whim and winch, kibbles, 2 large water-barnes, 2 small ditto, tackle and other small ropes, barrows, air machine, and other steel, hoop iron, powder, grease, oil, leather, an smiths' shop, change house, material house, carpenter's shop, account house and furniture, with numerous other articles.

All the above materials will be found of excellent quality, and most conveniently situated for removal, being within one mile of the Bodmin and Wadebridge Railway, and about the same distance from the Bodmin and Truro turnpike-road. The sale is to commence at Twelve o'clock precisely.

For viewing the same, and for all other information, apply to the agent, Capt. H. B. GAZER, on the mine.—Dated Withiel United Mine, Sept. 14, 1857.

TO BE DISPOSED OF, A LEAD MINE, in the centre of a good mineral district in WALES. The sett is very extensive, covering no less than 650 acres of land, intersected throughout with a large number of lodes, containing lead ore, blende, &c. There are erected on the mine a good water-wheel, crusher, dressing-screw, blacksmiths' and carpenter's shops, office, &c.—For further particulars, apply to "A. B.," at Mr. Rowland Evans, grocer, Aberystwyth.

WEST SORTBRIDGE CONSOLS.—FOR SALE, BY PRIVATE CONTRACT, the above MINE, in the parish of Whitechapel, Devon, together with ALL the MACHINERY and MATERIALS thereon, comprising a WATER-WHEEL, 15 ft. in diameter and 7 ft. breast; first-class 8-headed stamps; balance-bob, travelling-bob; shaft-bob; line of flat-rods (about 35 fms.) of ½ in. crown iron, with pulleys, complete; piece of 6 in. main rod; 200 fms. tram iron, ¾ by ¾; 35 fathoms whim-rope; 14 fms. ½ chain; 3 whim-kibbles; 7 ¾ in. capstans; and wood floors, &c.; about 7 or 8 cwt. of cast-steel rollers; 7 ¾ in. capstans; and sundry other articles, for which see catalogue.

The above mine adjoins the celebrated Sortbridge Consols Mine on the west, the discovery just made in the 40 west at which is looked upon as affecting most favourably the West Sortbridge sett, and adjoins Wheal Franco, which has also made good returns, and is in the immediate neighbourhood of North Wheal Robert, now making large returns.

The present adventurers have expended a considerable sum in laying out the lodes, and several hundred pounds worth of tin ore have been sold, but a number of the shareholders not paying their calls oblige the company to offer this promising mine with the machine, &c. Many of the present shareholders have been desirous of joining a new company, as they believe that with a small additional expenditure important discoveries will be made.

Every information, orders to inspect, and catalogues, may be obtained of J. H. M. CHURCH, Esq., 117, Bishopsgate-street-within, London.

VALUABLE BEDS OF CANNEL AND COAL MINES, POOL GREEN, NEAR BLACKROD.—TO BE LET, ALL those valuable BEDS or SEAMS OF CANNEL AND COAL MINES, called or known by the names of the Cannel Mine, King Coal, Yard Coal, Bone Coal, South Coal, and the Main Coal, or Arley Mine. The estate lies in a ring fence, containing about 26 statute acres, and is 200 yards from the Bolton and Preston Railway, and is intersected by the turnpike road from Blackrod to Manchester. The property is distant about six miles from Chorley, and about five miles from Bolton.

Proposals for working the above-named mines will be received by Messrs. JAMES WHITTE and SONS, land and mining agents, Charnock Richard, near Chorley. Hill Cottage, Charnock Richard, near Chorley, Sept. 1857.

VALUABLE ANTHRACITE COAL.—TO BE LET, under the Cannel and Arley Mines, the following valuable SEAMS OF COAL, or some of them may be worked under these properties:—The Wain Fynnon, the Drap, Gralgog, Green Big Seam, and Two Feet Seam, varying from 2 to 5 ft. thick. The situation of these farms with reference to the Gwendraeth Canal and the South Wales Railway, afford an easy communication to the ports of Pembrey and Kidwelly, as well as to the interior of England.—For further particulars, apply to Messrs. WHITE, BROTHERTON, and WHITE, solicitors, 12, Great Marlborough-street, W. London; Mr. GEORGE GOOD, Carnarvon; Mr. W. P. STUART, C.E., Swansea.

MINERAL DISCOVERY, AND TO LET.—This month has been discovered a LARGE MASS OF DECAYED SPATHOSE IRON ORE, of excellent quality, close on the shore, and easily worked. The mass is 100 ft. wide, and extends a mile inland. The slag of what has been smelted (supposed by the Romans or Danes) lies in large quantities contiguous. This deposit is quite distinct from the ore advertised (see Mining Journal of 5th September). Apply to Wm. FORLON, proprietor, of Erins, Loch Fyne, Argyshire.

PALE SLATE QUARRIES, NEAR CORWEN.

CERTAINTY OF SUCCESS TO CAPITALISTS.

The above very promising slate quarry has been partially opened about two years ago, and worked with such success as an imperfect clearing of the slate vein would admit of, and made to pay; during which time it has been satisfactorily ascertained that, at a comparatively very trifling outlay, abundance of slate of the best quality might be detached even during the process of clearing, and sent to market.

The present managers and lessees would be happy to DISPOSE OF ONE-HALF, or THREE-FOURTHS, in the concern, on very reasonable terms, their main object being to meet with parties who would advance the necessary sum (at so much per share) to give the quarry a thorough opening, which would not fail to render the undertaking a profitable, and even a lucrative one to the shareholders.

A water-power engine, for pumping and other purposes, has been recently erected, and the nature of the ground and other advantages offers every facility to the carrying on of extensive works.

Full particulars may be had on application to W. T. OWEN, manager, Pale Slate Quarry, near Corwen, North Wales.

LEAD ASHES, and LEAD WASTE of any description, WANTED TO PURCHASE; also, OLD LEAD or ZINC. FIG-LEAD FOR SALE.—Samples may be sent to CHAR. LOW, Smelting Works, Old Ford Wharf, Bow, London. Lead, Silver, and Copper Ores bought.</

PREVENT SMOKE AND INCREASE STEAM.

PATENT REGULATING AIR-DOOR, FOR MARINE AND STATIONARY STEAM-BOILERS, AND FOR LOCOMOTIVE AND OTHER FURNACES.
 London, July 28, 1857.—The action of your Patent Regulating Air-Door at the Royal Mint Gold and Silver Refinery is very satisfactory as regards the smoke. They also get up steam in the boilers quicker and maintain it better than before; and they afford the means of raising or lowering the heat in the refinery furnaces as the work may require. Your invention, in fact, deserves every encouragement and recommendation.
 J. Lee Stevens, Esq., 1, Fish-street-hill. Signed, A. ROTHCHILD.

For further particulars respecting the Patent Regulating Air-Door, and the Patent safety Marine Boiler; and with reference, also, to his Patent Land Furnace, Domestic stoves, and other inventions comprised in his System of Smoke Prevention, apply to Mr. JOHN LEE STEVENS, 1, Fish-street-hill, City, London (E.C.), where a great variety of models and drawings may be seen, and reports and testimonials obtained.

OVERLAND ROUTE.—STEAM TO INDIA AND CHINA, &c.,
 VIA EGYPT.—THE PENINSULAR AND ORIENTAL STEAM NAVIGATION COMPANY BOOK PASSENGERS AND RECEIVE GOODS AND PARCELS FOR THE MEDITERRANEAN, EGYPT, ADEN, BOMBAY, CEYLON, MADRAS, CALCUTTA, THE STRAITS, AND CHINA, by their steamers leaving Southampton on the 4th and 20th of every month.

For further particulars, apply at the company's offices, No. 123, Leadenhall-street, London; and Oriental-place, Southampton.

MESSRS. R. & J. COUPE, ENGINEERS AND IRONFOUNDERS,
 MANUFACTURERS OF HORIZONTAL HIGH-PRESSURE STEAM-ENGINES, from 10 to 200-horse power; the larger description of engine mounted with their improved SCREWDRUM SLIDE PISTON VALVE, which has proved itself so eminently adapted for winding and other engines.
 Clayton Foundry, Wigan.

THOS. GEMMELL AND CO., WIRE ROPE MANUFACTURERS,
 WORKS, FRIARHILL ROAD, SPRINGBANK, GLASGOW.
 WAREHOUSES.—Finnistoun Quay, Glasgow; 10, King-street, Liverpool; 43, Marischal-street, Aberdeen; 46, Osborn-street, Hull.

AGENTS:
 HENRY J. MORTON AND CO., 2, Basinghall-buildings, Leeds.
 GEORGE OUTRIM, Liverpool-road, Stoke-upon-Trent.
 ISAAC NAYLER, Didsdale, near Dudley.
 J. WADDINGTON, 109, Millgate, Wigan.
 THOMAS REID, 33, Quay-side, Newcastle-upon-Tyne.

PATENT WIRE ROPES, ONE-HALF THE COST OF HEMP ROPES.—HENRY J. MORTON AND CO.'S (No. 2, BASINGHALL BUILDINGS, LEEDS) PATENT WIRE ROPES, for the use of MINES, COLLIERIES, RAILWAYS, &c.; one-half the weight of hemp rope, and one-third the cost; one-third the weight of chains, and one-half the cost—in all deep mines these advantages are self-evident. References to most of the principal colliery owners in the kingdom. GALVANISED SIGNAL CORDS AND KNOCKER LINES: will not rust or corrode, and not affected by the copper water in mines. Very strong, and not at all liable to break. Prices from 10s. per 100 yards.

CROGGON'S PATENT ASPHALTED ROOFING FELTS, 1d. per foot.
 DRY HAIR BOILER FELTS, TO SAVE COAL.
 PATENT BOILER COMPOUND, for bad water.
 FAIRBANK'S WEIGHING MACHINES, of all sizes.
 GALVANISED IRON ROOFING AND SPOUTING.
 PATENT FLEXIBLE STEAM PACKING, 1s. 3d. per lb.
 PATENT METALLIC PACKING, 4s. per lb.
 PATENT AMERICAN DRIVING BANDS, much cheaper and more durable than leather.
 PATENT GALVANISED AIR PIPES, for ventilation.

STOCK OF MINING AND RAILWAY STORES in Liverpool and London:—viz. OILS, GREASES, COTTON WASTE, SPUN YARN, WHITE LEAD, VARNISHES, &c.; and at very low prices.—Address, 2, Basinghall-buildings, Leeds. N.B. Illustrated price list on application.

MOST IMPORTANT TO COLLIERY OWNERS AND COLLIERY MANAGERS.—HENRY J. MORTON AND CO., GALVANISED IRONWORKS, No. 2, BASINGHALL BUILDINGS, LEEDS, beg to call attention to their IMPROVED SIGNAL BELLS.

It has met with the decided approval of many large colliery owners and managers. SIMPLE, EFFICIENT, and CHEAP. Price from £1 to £1 5s. each.

BYAM'S PATENT ANEMOMETER, for testing the ventilation. Price £3 3s. to £4 4s. each.

STEAM PRESSURE GAUGES, very strong and accurate, £2 and £3 12s. 6d. each. For further information, apply to H. J. MORTON AND CO., 2, Basinghall-buildings, Leeds.

FAIRBANK'S IMPROVED PATENT WEIGHING MACHINES, for the use of IRONWORKS, COLLIERIES, RAILWAYS, WAREHOUSES, STORES, &c. The most accurate machines in use, and the cheapest. MACHINES of all sizes, from 1 cwt. to 30 tons, for RAILWAY WAGONS, CARRS, or WAGONS.—For prices and all other information, apply to HENRY J. MORTON AND CO., Galvanised Ironworks, 2, Basinghall-buildings, Leeds. Croggon's Patent Asphalting Roofing Felts, Boiler Felts, Galvanised Iron, &c., in Stock.

PATENT COMBINED GAS WORKS, of all sizes, for the use of PRIVATE HOUSES, MANSIONS, RAILWAY STATIONS, MILLS, COLLIERIES, VILLAGES, &c. FIXED COMPLETE, with greatly improved means for purifying, &c. Works of all sizes, from 10 lights to 500 lights, estimated for. The construction is so simple, that the works can be entrusted to the management of an ordinary labourer or servant.

Apply to H. J. MORTON AND CO., Galvanised Iron Works, 2, Basinghall-buildings, Leeds. SOLE LICENSERS AND AGENTS.

TO ENGINEERS, RAILWAY COMPANIES, STEAM PACKET COMPANIES, COLLIERY OWNERS, MILL OWNERS, &c.—WARREN'S IMPROVED ANGLO-AMERICAN FLEXIBLE CANVAS, and MINERALISED INDIA RUBBER, PACKING FOR STEAM JOINTS, PUMP CLACKS, VALVES, &c.—The attention of all using steam-power is called to this elastic packing, possessing advantages which renders it the cheapest in use. Reducing friction, saving time and labour, and lasting as many months as hemp or spun yarn will weeks. Price 1s. 4½d. per pound, carriage paid.

Also, MINERALISED INDIA RUBBER HOSE PIPES, TUBINGS, MILL BANDS, and WASHERS. The attention of engineers, mill owners, machine makers, brewers, and others, is called to the above improved hose pipes and machine belting or mill bands, the important advantages of which, as regards durability, efficiency, and cheapness, are too well known and appreciated to need comment.

For lists of prices, apply to the agents, HENRY J. MORTON AND CO., Galvanised Ironworks, 2, Basinghall-buildings, Leeds.

INDIA RUBBER WASHERS FOR JOINTS for steam, water, and gas, of all sizes.

TO IRONMASTERS.—GAUNTLETT'S PATENT PYROMETER, OR HEAT GAUGE FOR HIGH TEMPERATURES.

Ever since the important invention of heated blast in the smelting of metallic ores was brought into general use, the want of an accurate and durable thermometer for indicating the heat of the blast has been generally experienced. That want is now supplied by this instrument.

Its ADVANTAGE consists in its capability of INDICATING HIGH TEMPERATURES beyond the reach of the ordinary mercurial thermometer. Its extreme sensitiveness, and the precision with which it registers high temperatures, renders it invaluable as an appendage to the heating stoves of blast furnaces. The fireman, if guided by its indications, is enabled to MAINTAIN a UNIFORM TEMPERATURE in the stove (an important matter in blast furnace operations), whereby a considerable saving of fuel may be effected, both in that used to heat the stove, as well as that which is consumed in the furnaces to smelt the minerals. These gauges are supplied only by W. J. LEWDAW, Middlebrough-on-Tees.

BY HER MAJESTY'S ROYAL LETTERS PATENT.

THE DISPATCH OIL SOCKET AND AXLE CLEANER.
 To be set in the Hubs or Naves of all kinds of Wheels, in New or Old Carriages (with or without patent or close boxes), Coaches, Omnibuses, Cabs, Carriages, Heavy Wagons, Artillery, Dray Carts, &c., of every description. For OILING and thoroughly CLEANING the AXLES without taking off the wheels, and in one minute.

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